

DOCUMENT RESUME

ED 115 254

IR 002 798

AUTHOR Nordgren, Peter D.  
 TITLE Cooperative Program Tape Networks in Noncommercial Radio.  
 PUB DATE Dec 75  
 NOTE 94p.

EDRS PRICE MF-\$0.76 HC-\$4.43 Plus Postage  
 DESCRIPTORS \*Cooperative Programs; \*Educational Radio; Higher Education; \*Programing (Broadcast); \*Questionnaires; Shared Services; Statistical Data; Tables (Data)  
 IDENTIFIERS Cooperative Program Tape Networks

ABSTRACT

Over 200 noncommercial radio stations responded to a survey to gather data on the characteristics of member stations and to sample the opinion of nonmembers toward a cooperative network concept. A second survey of 18 networks sought to gather indepth information on network operation. Results showed that 22.2 percent of the stations surveyed were participating in program cooperatives, and over 79 percent felt that network participation would be beneficial. It was concluded that the cooperative program tape network should continue in order to fulfill specialized programing needs. A copy of the two questionnaires, the letter of transmittal, and the mailing list is appended. A list of the networks that participated in the study, 12 statistical tables, and a 20-item bibliography are included. (Author/DS)

\*\*\*\*\*  
 \* Documents acquired by ERIC include many informal unpublished \*  
 \* materials not available from other sources. ERIC makes every effort \*  
 \* to obtain the best copy available. Nevertheless, items of marginal \*  
 \* reproducibility are often encountered and this affects the quality \*  
 \* of the microfiche and hardcopy reproductions ERIC makes available \*  
 \* via the ERIC Document Reproduction Service (EDRS). EDRS is not \*  
 \* responsible for the quality of the original document. Reproductions \*  
 \* supplied by EDRS are the best that can be made from the original. \*  
 \*\*\*\*\*

ED115254

COOPERATIVE PROGRAM TAPE NETWORKS  
IN NONCOMMERCIAL RADIO

10/11/75

by

Peter D. Nordgren

U S DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

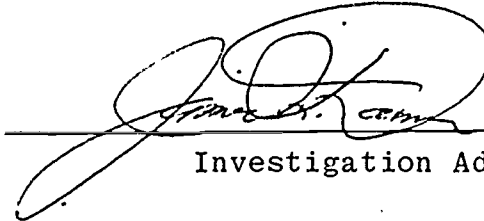
A Research Paper

Submitted to Complete the

Plan B. Requirements in

407-722

Problems in Audio-Visual Communications



---

Investigation Adviser

The Graduate College  
University of Wisconsin-Stout  
December 1975

798

IR 002

University of Wisconsin--Stout  
The Graduate College

ABSTRACT FORM -- INVESTIGATION (PLAN B)

(Writer of Study)	Nordgren Last Name	Peter First	D. Initial	(Maiden)
-------------------	-----------------------	----------------	---------------	----------

COOPERATIVE PROGRAM TAPE NETWORKS IN NONCOMMERCIAL RADIO  
(Title of Investigation)

Dr. James Daines (Investigation Adviser)	December 1975 (Month) (Year)	85 (No. of Pages)
---	---------------------------------	----------------------

Statement of the Problem: Cooperative program tape networks provide a method of obtaining program material for use in radio programming. Noncommercial radio stations have been the most frequent users of the program cooperative: there has been sporadic interest and activity over the history of the medium. More recently, the "coming of age" initiated by the 1967 Public Broadcasting Act and its results have stimulated some new efforts in program cooperation. However, this growth has not been accompanied by meaningful documentation of cooperative tape program network activities between noncommercial radio stations.

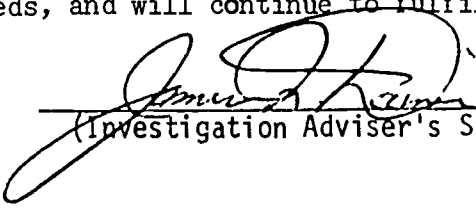
Research Design:

A review of related literature and a two-phase survey were used. The review established historical background, discovered some documentation of current efforts as well as implications toward future development of cooperative networks. The initial survey, given to 203 noncommercial radio stations on a nationwide basis, sought to identify operating networks, gather data on characteristics of member stations, and sample opinion of nonmembers toward the cooperative network concept. The final survey, given to 18 networks, sought in-depth information on network operations.

Findings:

The nationwide survey showed that 22.2% of those stations surveyed were participating in program cooperatives. Participating stations generally had higher power and more full- or part-time employees than nonparticipants. Most participants either received more than \$20,000 yearly or \$1,000 to \$5,000 yearly. Over 79% of those program directors whose stations were nonparticipants felt that network participation would be beneficial; opinion was divided as to whether participation would impose a strain on station resources. Among those networks surveyed, the majority had fewer than 10 member stations; had been in operation less than three years; and were organized on a statewide basis. A number of other characteristics were examined. It was concluded that the cooperative program tape network is an integral part of present-day noncommercial radio, serving specialized programming needs, and will continue to fulfill these needs in the future.

- cc: (1) Graduate College  
(2) Investigation Adviser  
(3) Major Adviser  
(4) Program Director  
(5) Student

  
(Investigation Adviser's Signature)

## ACKNOWLEDGMENTS

This study was made possible only through the efforts of the following persons and organizations:

Kenneth M. Buehler

Dr. James Daines

Richard A. DeFore

James Hashek

William F. Jaffe'

Carol A. Johnson

Arthur C. Matthews

Dr. William Micheels

Richard Wiese

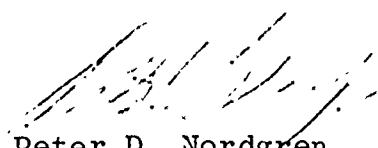
WVSS-FM, University of Wisconsin-Stout

WSSU-FM, University of Wisconsin-Superior

The Wisconsin Intercampus Radio Network

and the many persons in noncommercial radio stations across the nation, who showed their confidence in the bright future of the medium in their responses to questionnaires.

My sincere thanks to all of them.

  
Peter D. Nordgren  
August 8, 1975

## TABLE OF CONTENTS

	Page
LIST OF TABLES . . . . .	vii
Chapter	
1. INTRODUCTION TO THE STUDY . . . . .	1
STATEMENT OF THE PROBLEM . . . . .	2
PURPOSE OF THE STUDY . . . . .	2
METHOD OF THE STUDY . . . . .	3
SCOPE AND LIMITATIONS OF THE STUDY . . . . .	3
DEFINITION OF TERMS . . . . .	6
2. REVIEW OF RELATED LITERATURE . . . . .	9
HISTORICAL BACKGROUND . . . . .	10
RECENT AND CURRENT DEVELOPMENTS . . . . .	14
IMPLICATIONS TOWARD FUTURE DEVELOPMENT . . . . .	17
3. METHODOLOGY . . . . .	21
THE POPULATION . . . . .	21
THE METHOD . . . . .	22
Phase I . . . . .	22
Phase II . . . . .	24
SURVEY INSTRUMENTS . . . . .	24
Phase I . . . . .	24
Phase II . . . . .	27

## TABLE OF CONTENTS (Con't.)

	Page
RATE OF RETURN . . . . .	29
Phase I . . . . .	29
Phase II. . . . .	29
DATA ANALYSIS PROCEDURES . . . . .	30
4. PRESENTATION AND ANALYSIS OF DATA . . . . .	32
PHASE I. . . . .	33
General Results: Membership In Networks . . . . .	33
Comparison of Characteristics: Members and Nonmembers Radiated Power . . . . .	34
Nonmember Opinions Concerning Benefits of Network Membership . . . . .	39
Nonmember Opinions Concerning Demands of Network Membership . . . . .	41
PHASE II . . . . .	43
General Response. . . . .	43
Structure . . . . .	44
Administration. . . . .	45
Funding . . . . .	46
Programming. . . . .	46
Operational Functions . . . . .	47
5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS. . . . .	40
SUMMARY. . . . .	50
The Problem . . . . .	50
The Purpose . . . . .	50
The Method. . . . .	50

## TABLE OF CONTENTS (Con't.)

	Page
Findings. . . . .	51
CONCLUSIONS. . . . .	53
RECOMMENDATIONS. . . . .	56
BIBLIOGRAPHY. . . . .	58
APPENDIX A Initial Questionnaire and Letter of Transmittal. . . . .	61
APPENDIX B Mailing List for Initial Questionnaire. . .	64
APPENDIX C Final Questionnaire and Letter of Transmittal . . . . .	74
APPENDIX D Mailing List for Final Questionnaire. . . .	80
APPENDIX E Cooperative Program Tape Networks Participating in the Study. . . . .	83

## LIST OF TABLES

Table	Page
1. . COOPERATIVE NETWORK MEMBER VS. NONMEMBER RESPONDENTS CATEGORIZED ACCORDING TO EFFECTIVE RADIATED POWER CLASSIFICATION. . . . .	35
2. COOPERATIVE NETWORK MEMBER VS. NONMEMBER RESPONDENTS CATEGORIZED ACCORDING TO POPULATION OF COVERAGE AREA. . . . .	36
3. COOPERATIVE NETWORK MEMBER VS. NONMEMBER RESPONDENTS CATEGORIZED ACCORDING TO YEARLY FUNDING LEVEL . . . . .	37
4. COOPERATIVE NETWORK MEMBER VS. NONMEMBER RESPONDENTS CATEGORIZED ACCORDING TO NUMBER OF FULL- AND PART-TIME EMPLOYEES . . . . .	38
5. COOPERATIVE NETWORK MEMBER VS. NONMEMBER RESPONDENTS CATEGORIZED ACCORDING TO NUMBER AVAILABLE PRODUCTION AREAS . . . . .	39
6. OVERALL REACTION OF NONMEMBERS TO BENEFICIALITY STATEMENT. . . . .	40
7. REACTIONS OF NONMEMBERS TO BENEFICIALITY STATEMENT: CATEGORIZED ACCORDING TO AVAILABILITY OF PROGRAM MATERIAL FOR PARTICIPATION. . . . .	41
8. OVERALL REACTION OF NONMEMBERS TO STATEMENT ON IMPOSITIONS OF PARTICIPATION. . . . .	42
9. REACTIONS OF NONMEMBERS TO STATEMENT ON IMPOSITIONS OF PARTICIPATION: CATEGORIZED ACCORDING TO AVAILABILITY OF PROGRAM MATERIAL FOR PARTICIPATION . . . . .	42
10. NUMBER OF MEMBER STATIONS IN NETWORKS SURVEYED. . . . .	44
11. PLANS OF ORGANIZATION FOR NETWORKS SURVEYED. . . . .	44



## LIST OF TABLES (Con't.)

Table	Page
12. INSTRUMENTS OF ORGANIZATION USED BY NETWORKS SURVEYED. . . . .	45
13. TYPES OF PROGRAMMING EXCHANGED BY NETWORKS MEMBERS . . . . .	47
14. DISTRIBUTION PLANS UTILIZED BY NETWORKS SURVEYED. . . . .	48
15. TAPE SHIPMENT METHODS USED BY NETWORKS SURVEYED . . . . .	48

## Chapter 1

### INTRODUCTION TO THE STUDY

Noncommercial radio stations in the United States exist to provide "a nonprofit and noncommercial broadcast service" which "may transmit educational, cultural, and entertainment programs to the public."<sup>1</sup> Generally, this definition by the Federal Communications Commission is interpreted to mean the furnishing of an alternative in programming to that of commercial radio stations, with high emphasis on program variety with intellectual and cultural quality. Stations strive to air from twelve to eighteen hours per day of this material, either live or prerecorded on record or tape.

Certain limitations can keep the noncommercial radio program director from meeting this goal. Money is foremost: good quality prerecorded programming is expensive to produce locally or buy from production companies or other stations. Noncommercial stations often operate on rather limited budgets drawn from institutional funds or listener donations. Another limitation on variety, quality, and quantity may be

---

<sup>1</sup>U.S., Federal Communications Commission, Rules and Regulations, Vol. III, Subpart C, Sec. 73.503 (Washington: Government Printing Office, 1968).

the size and abilities of station staff. Also, limited facilities and resources may preclude certain types of production.

#### STATEMENT OF THE PROBLEM

A viable option in sources of program material would seem to be the establishment of cooperative tape program between stations. There has been sporadic interest in program cooperatives over the history of the medium. More recently, the "coming of age" initiated by the 1967 Public Broadcasting Act and its results have stimulated some new efforts in program cooperation. However, this growth has not been accompanied by meaningful documentation of cooperative tape program network activities between noncommercial radio stations.

#### PURPOSE OF THE STUDY

The purpose of this study was to identify several cooperative radio program tape networks in operation within the United States. Upon identification, the study further sought to obtain data on certain significant aspects of those networks, specifically their structure, administration, funding, programming, and operational functions. This data was to be combined with a national sampling of opinion from noncommercial radio program directors concerning the practicality and benefits of participation in program cooperatives, in order to draw conclusions regarding the

viability of the cooperative radio program tape network as a method of obtaining program material for noncommercial radio stations.

#### METHOD OF THE STUDY

The study was accomplished through a review of related literature and two surveys. The initial survey, distributed to 203 randomly selected noncommercial radio program directors nationwide, sought (1) to identify stations participating in cooperative program tape exchanges, and (2) to obtain a sampling of opinion on the practicality and benefits of cooperation from those stations which were nonparticipants.

The final survey was directed to the central officers of the exchanges identified in the first survey. If an exchange had no central officer, the survey was directed to the program director of one of its member stations as identified in the initial survey. The final questionnaire was concerned with data on the structures, administration, funding, programming, and operational functions of the exchanges which were identified in the initial survey. Results of these questionnaires were tabulated and treated statistically.

#### SCOPE AND LIMITATIONS OF THE STUDY

The scope of the study was essentially nationwide. The study population consisted of all noncommercial radio

stations in the United States, as defined and licensed by the Federal Communications Commission.

Two other potential member groups for the population were eliminated during the planning stages. These were cable radio stations and carrier current radio stations. Many of these types of stations were operated by the same groups which operate noncommercial broadcast radio stations, such as institutions of higher education or community organizations. These are not necessarily noncommercial stations, however, and quite often their programming is not similar to that of noncommercial radio. Hence, they were not included in this study.

Since the study related to the exchange of taped radio programs, a consideration of the programming policies of noncommercial radio stations was in order. Most stations use a block programming format, with programs having definite starting and end points marking off a block of time. A few stations use a free form programming format, with no well defined points of program delineation. And there are a number of stations using a blending of these policies, some programs well defined in blocks and others free form.

Standardized programs in ten-minute, half-hours, and other lengths would seem to be most adaptable to the program exchange concept, and stations with this type of format may well be the chief beneficiaries of exchange participation. Format, however, was not examined in this study. Stations using the free form programming format or its derivatives

can still make good use of certain types of exchanged materials, such as short news or public affairs stories. Hence the study was applicable to stations with both formats.

There are a number of aspects of radio program tape exchange which are suitable for formal study. Among these are interrelationships between noncommercial and commercial radio stations; the operation of "subscription networks" such as the Longhorn Network of the University of Texas at Austin; the relationship between membership in National Public Radio (a live noncommercial network) and membership in tape exchanges. It was decided to concentrate on the cooperative tape exchanges; to limit the study to exchanges between noncommercial radio stations only; and to seek data only on five aspects of these exchanges: structure, administrative methods, funding, types of programming, and operational functions. These characteristics were chosen as the most representative points of comparison between exchanges.

An initial limitation was thought to be the small number of exchanges in operation, since the literature review showed little information on cooperative exchanges. The initial questionnaire revealed much more activity than was anticipated, so the number of exchanges, and its implications toward applicability of the study data, is not seen as an important limiting factor.

## DEFINITION OF TERMS

The following terms have been used consistently throughout this report in the meanings given below.

Cable radio station - a non-licensed radio station broadcasting on an FM radio frequency through television cable systems to a campus or community, rather than through the air.

Carrier current radio station - a non-licensed radio station broadcasting on an AM radio frequency through electrical or other induction systems in buildings, rather than through the air.

Cooperative program tape network - any system by which two or more radio stations share self-produced program material through exchange of audio tapes.

Educational radio - a term used interchangeably with noncommercial radio in the literature.

Instructional radio - noncommercial radio stations whose primary purpose is considered to be broadcasting of instructional programming to school systems, or to the general public.<sup>2</sup>

National Association of Educational Broadcasters (NAEB) - The professional organization of persons involved in noncommercial radio and television. Formerly, parent

---

<sup>2</sup>NAEB, Radio's Role in Instruction (Washington, D.C.; National Association of Educational Broadcasters, 1972), p. 6.

organization for the National Educational Radio Network (NERN, or NAEB Tape Network), a cooperative program tape network.

National Public Radio (NPR) - A nonprofit corporation, funded primarily by the Corporation for Public Broadcasting, which produces and distributes national programming and manages the interconnection of CPB-qualified stations.<sup>3</sup>

Noncommercial radio - Those broadcast radio stations in the AM and FM frequency bands which are licensed as "non-commercial educational radio stations" by the Federal Communications Commission and so designated in Broadcasting Yearbook.

Public radio station - A noncommercial station which is (1) publicly owned (by a local community or municipality, state agency, school system, college, or public corporation) and (2) subsidized (by state or local taxes or foundation grants). It is eligible for support from CPB and Federal facility grants.<sup>4</sup>

Round robin network - A network in which information is circulated in a fixed pattern, from source to member, to member, etc., and eventually back to the source. Each member can act as a source but all materials pass through all members before returning to the source. This is also referred to as bicycling.

---

<sup>3</sup>U.S., Department of Health, Education, and Welfare, Summary Statistics of CPB-Qualified Public Radio Stations, Fiscal Year 1972, (by Ronald J. Pedone, et al). (Washington: U.S. Government Printing Office, 1973), p. 66.

<sup>4</sup>Ibid., p. 67.



Subscription network - A network centered around a single source of program material. Distribution is outward only, from that source to the user. Network programming may be either live, taped, or a combination of both. There may be a fee involved in the use of such programming.

## Chapter 2

### REVIEW OF RELATED LITERATURE

Research in noncommercial radio has historically been very sparse. In 1967, the NAEB produced an overview of the status of noncommercial radio entitled The Hidden Medium.<sup>5</sup>

Its authors found that

There is a profound lack of knowledge on educational radio which only research can fulfill. . . the total job that needs to be done is so huge that more broad research is needed.<sup>6</sup>

The Public Broadcasting Act of 1967 and subsequent developments have stimulated new research to fill some of these needs. However, noncommercial radio program tape networks are one of the areas that remain largely undocumented.

Accordingly, an examination of journals, research reports, and periodicals revealed only a few direct references to the topic. There were, however, a number of peripheral and related sources; when combined with the direct references, these were sufficient to develop conclusions about certain aspects of cooperative tape networks.

---

<sup>5</sup>Land Associates, Incorporated, The Hidden Medium: A Status Report on Educational Radio in the United States (Washington: National Educational Radio, 1967).

<sup>6</sup>Ibid., pp. 1-16.

A factor which clouded some of the references was the failure of some sources before 1970 to specify, in discussing noncommercial networks, whether live networks or tape networks were the topic. The advent of National Public Radio as the nationwide live noncommercial network in 1970 seems to have solved this problem; sources utilized which were published after that year have specified quite clearly the type of network under discussion.

This review concerns three aspects of the research problem. First, historical background of the cooperative program tape network is explored. Second, current applications and examples of the cooperative network are outlined. Third, implications toward current and future development of cooperative networks are discussed.

#### HISTORICAL BACKGROUND

The first cooperative program exchange networks between noncommercial radio stations were undoubtedly formed during what has been termed "those great, wild early days of AM radio."<sup>7</sup> The period referred to is that of the 1920s and 1930s, when both commercial broadcasters and their educational counterparts were enthusiastically experimenting with uses of the medium.

An early reference to the concept of the program

---

<sup>7</sup>Lorenzo W. Milam, Sex and Broadcasting: A Handbook on Starting a Radio Station for the Community (2nd edition) (Los Gatos, California: KTAO, 1972), p. 8.

exchange appears in Cooper's Bibliography of Educational Broadcasting, a collection of significant citations published in 1942. Ten years earlier, in 1932, T. M. Beard of the Association of College and University Broadcasting Stations published an article concerning cooperation in educational radio. This article included discussion of, and a plea for, the development of an exchange plan for recorded educational programs between both university-owned noncommercial stations and commercial stations.<sup>8</sup> Since this was prior to the invention of recording tape, this would actually have been a transcription exchange network; however, the concept is exactly the same as that of a cooperative tape network. No later reference was found to show whether the proposed network actually came into existence at a later date. Its documentation in a comprehensive bibliography does indicate that the exchange concept was a topic of interest to the early noncommercial broadcaster.

The most significant activity to be documented was the National Educational Radio Network (NERN), also known as the NAEB Tape Exchange. According to Singh and Morgan, this organization began operation in 1948. Until 1956, it operated as a "true" cooperative, with no charges to participating stations other than the production costs of their own programs. Later, administrative charges were added to the responsibility of participation--probably to support the

---

<sup>8</sup>Isabella M. Cooper, Bibliograph on Educational Broadcasting (Chicago: University of Chicago Press, 1942, reprinted, 1971), pp. 264-265.

network's central tape duplication facility at the University of Illinois in Champaign-Urbana.<sup>9</sup>

Simkins states that more than 275 stations were served by NERN.<sup>10</sup> Eventually, its functions were absorbed by National Public Radio in 1970 and operated as its subscription tape service; thus, it passed out of the classification of a cooperative program tape network.

NERN, while apparently effective, also experienced problems which reflect upon those which might be encountered in the operation of any cooperative network.

In a review of programs distributed through NERN in 1970, Marjorie Newman found that

. . . aside from content NERN programs continue to suffer from technical inferiority. Many of the programs have obviously been put together with little concern for matched levels or professional editing. . .

She suggested that a screening system be enforced for all programs.<sup>11</sup> This seems to underscore a need for a central administration or other mutual arrangement to oversee program quality.

Mott stated that NERN's affiliates were not prolific in producing and sharing programs of high content quality.

---

<sup>9</sup>Jai P. Singh and Robert P. Morgan, Educational Electronic Information Dissemination and Broadcast Services: History, Current Infrastructure, and Public Broadcasting Requirements (St. Louis: Washington University Internal Memorandum #71/3, 1971), p. 9.

<sup>10</sup>Tanya Simkins, "Public Radio: Coming Out of Hiding," Educational Broadcasting, VII (May/June 1974), p. 15.

<sup>11</sup>Marjorie Newman, "Five Minute Radio Programs" (review), Educational Broadcasting Review, IV (June, 1970), p. 70.

Yet, he felt that the organization provided a viable and beneficial service to its members. Because of this, he advanced the modernization of NERN's duplication and distribution methods over the proposed establishment of a live network (the movement that eventually created NPR) in 1967. It was his opinion that live interconnection would be justified only when tape networking was well developed.<sup>12</sup>

The Hidden Medium, a landmark study produced by the NAEB, lists a number of noncommercial networks in the formation stages in 1967. These were located in Colorado, Pennsylvania, and Oregon, among others; however, the study did not differentiate between live networks and tape networks, leaving the actual status of these plans uncertain.<sup>13</sup>

Singh and Morgan cite one other example of a cooperative program tape network. This was the Intercollegiate Broadcasting System tape exchange. Its membership was primarily carrier current radio stations but also included a number of noncommercial FM stations. The actual stations involved were not cited. The exchange involved distribution of 4 3/4 hours of programming produced by a few member stations to a larger number of participants.<sup>14</sup> According to Arthur C. Matthews, Coordinator of Radio at the University of Wisconsin-Stout, this exchange had gone out of existence

---

<sup>12</sup>Robert A. Mott, "Some Disadvantages of a Live Radio Network," NAEB Journal, XXV (March-April, 1966), p. 6.

<sup>13</sup>Land Associates, pp. VII, 8, 9.

<sup>14</sup>loc. cit., Singh and Morgan, p. 10.

by 1974 due to lack of interest among member stations.<sup>15</sup>

It is probable that other cooperative program tape networks--regional, statewide, or organized according to special needs--have existed at various times between the 1920s and 1970. Young, in a 1970 assessment of the future of public radio, pointed out that networks in noncommercial radio had generally been informal tape exchanges between groups of stations.<sup>16</sup> The high cost of live interconnection, along with the other related problems of funding and operation, had made it possible for only one state--Wisconsin--to construct a live statewide noncommercial network by 1967.<sup>17</sup> No national live network was possible until the Public Broadcasting Act brought about the federal funding that created National Public Radio. Hence, conditions were such that the noncommercial broadcaster who wished to share resources with others would automatically turn to the cooperative tape network.

#### RECENT AND CURRENT DEVELOPMENTS

The availability of a live nationwide noncommercial network which drew heavily upon the resources of its member

---

<sup>15</sup>Statement by Arthur C. Matthews, Coordinator of Radio, University of Wisconsin-Stout, Personal interview, Menomonie, Wisconsin, April 3, 1975.

<sup>16</sup>Elizabeth L. Young, "Public Radio in the Seventies," Educational Broadcasting Review, IV (December, 1970), p. 50.

<sup>17</sup>David E. Platts, "Current Status of State-wide Educational Radio Networks," Educational Broadcasting Review, II (June, 1968), p. 44.

stations for program material would seem at first glance to eliminate the need for further exchange of program material on tape. Yet this has not been the case following the creation of NPR. The need for, and interest in, cooperative and subscription networks has continued.

One reason behind the continued interest is the limitations placed upon NPR affiliation. Only those stations which are CPB-qualified (meeting certain standards of operating power, broadcast hours, full-time staff size, and program format set by the Corporation for Public Broadcasting) may become NPR affiliates. According to Matthew Coffey, president of the Association of Public Radio Stations, there were 147 affiliated stations in 1974.<sup>18</sup> This meant that over 500 noncommercial stations were not eligible.

Furthermore, NPR's programming consisted of cultural, informational, and public affairs programs. Noncommercial radio stations have program needs other than these, some of which may not be within the scope of local production. In fiscal year 1972, Corporation for Public Broadcasting statistics showed that 7.8% of all broadcast time on CPB-qualified stations was given to programs on tape from other noncommercial stations. These programs were obtained through either subscription or cooperative networks.<sup>19</sup>

Of those stations which are not NPR affiliates, two

---

<sup>18</sup>Simkins, p. 17.

<sup>19</sup>Pedone, et al., p. 56.



types have been shown to be involved with cooperative program tape network activities: community radio stations and college or university-owned radio stations.

Low and medium power "community" or "alternative" radio stations are generally supported by listener contributions, and operated by volunteers or part-time employees. These stations have a particular programming need for material on issues of controversy or social import. Milam discusses the tape exchange in his book on community radio, citing an example:

The KRAB Nebulae stations. . . simply send good tapes in apparently random order to each other--but they seem reluctant to get any strange stations involved which might lose their tapes.

He suggests that others may wish to initiate their own exchange efforts.<sup>20</sup>

College and university stations which are not NPR affiliates have also shown an interest in the sharing of programs on a cooperative basis. Some of these efforts have been noted in Billboard magazine. Its 1974 forecast edition found that interest in the organization of cooperative networks had reappeared in several Midwest states (the exact states involved were not named) and also in California. It was pointed out that such organizations were a means of stimulating professional attitudes among student broadcasters.<sup>21</sup> A later issue mentioned a proposed network

---

<sup>20</sup>Milam, p. 39.

<sup>21</sup>"Campus News," Billboard, January 5, 1974, p. 12.

involving tape exchanges between college-owned stations in Michigan, Illinois, and Iowa which was discussed at a conference in late 1973.<sup>22</sup>

It is apparent that the cooperative tape exchange, which once served general educational and informational needs of noncommercial broadcasters through NERN, has served specialized needs in recent years. There are other special needs which it may yet fulfill; these are documented in the section which follows.

#### IMPLICATIONS TOWARD FUTURE DEVELOPMENT

One area of strong need which has been discussed in literature is that of instructional radio programming. Several reports produced by the NAEB in the early 1970s address the problem of instructional program design, production, promotion, and exchange.<sup>23</sup> NPR was providing, as part of its subscription tape service, programs for those stations which were involved in broadcasting to classrooms or credit-by-radio. An NAEB task force found, however, that the program offerings were unsatisfactory, and recommended that there

---

<sup>22</sup>"Campus News," Billboard, March 9, 1974, p. 12.

<sup>23</sup>Richard O. Forsythe, Instructional Radio: A Position Paper, ERIC Clearinghouse on Media and Technology, Stanford, California, 1970; NAEB, Radio's Role in Instruction. Report and Recommendations of the Instructional Task Force of National Educational Radio, Washington, D.C.: National Association of Educational Broadcasters, 1972; Warren F. Siebert, "Broadcasting and Education: ERIC/EBR Annual Review Paper," Educational Broadcasting Review, VI (June, 1972).

be developed duplication and distribution systems for instructional radio and audio programs and associated materials.<sup>24</sup> As Charles A. Siepman pointed out in an earlier NAEB study,

Radio makes possible the pooling of teaching talent of the highest order as between co-operating institutions of higher learning however widely separated in space, whether regionally, nationally, or, occasionally, internationally.<sup>25</sup>

The potential for cooperative efforts in designing, producing, and exchanging instructional programs is stressed because of the large amount of time, energy, and expense that go into an effective program.

This special need for exchange of instructional programs implies that there are other special needs which might form a basis for a cooperative network. Foreign language programs, religious broadcasts, programs on ecological concerns, and children's programs are examples.

Despite their many bases of organization, cooperative tape networks share the problems of all consortiums for exchange of software materials. Peterson, in a 1975 article, discussed considerations to be made when setting up any network for audiovisual materials exchange. The following points of consideration are directly applicable to the planning of cooperative program tape networks.

---

<sup>24</sup>NAEB, pp. 7-8.

<sup>25</sup>Charles A. Siepman in Educational Communications Systems: Phases I & II (by James A. Fellows and John P. Witherspoon)(Washington: National Association of Educational Broadcasters, 1965), p. 24.

- A mutual, definable need must be established upon which to develop the network organization.
- Network participants must make a commitment of finances or resources early in the planning stages.
- If some network participants do not contribute to the software base, all must agree that those who do contribute have certain rights and responsibilities above and beyond those who are simply users of the network service.
- Development of policy and procedure must involve as many network participants as possible.
- A clear understanding of procedures must be shared by all who participate. Compromise and variance from these procedures should be the responsibility of the network director or central officer.
- When the network is organized, all services which are already available (such as tape duplication facilities or special shipping services) should be examined closely to avoid duplication of effort.<sup>26</sup>

It has been shown that there are current needs for exchange of programs on tape between noncommercial radio stations, and that these needs will continue into the future. Despite current experiments with satellite interconnection, it is highly unlikely that the cost of live networking between noncommercial stations will be reduced to the point that a large number of stations could use it to serve special program needs.

Program exchange networks are presently being utilized or planned in various sections of the United States. Stations affiliated with the live NPR network are also using the cooperative network to obtain program material to

---

<sup>26</sup>Gary T. Peterson, "Networking and Audiovisual Materials," Audiovisual Instruction, XX (March, 1975), p. 18.

augment NPR and local production.

Historically, the cooperative network has been used to share program material since the early days of noncommercial radio. In terms of number of members and length of operation, the NERN with 275 members and 22 years of service is the outstanding example.

Any future cooperative program tape network will probably face the problems experienced by NERN: quality control in both content and technical aspects, and quantity of participation. Solution of these problems would seem to be necessary in the planning and management of a viable cooperative effort. A well-organized plan, designed around those points of consideration identified by Peterson, would be an appropriate means toward successful development.

## Chapter 3

### METHODOLOGY

Two essentially separate goals were identified during the planning stages preceding data collection.

The first goal was the identification of several cooperative program tape networks between noncommercial radio stations, with the gathering of a limited amount of statistical and opinion data from these stations. In meeting this goal, it was desirable to make contact with stations across as broad a stratum of noncommercial radio as possible, particularly in terms of geographic location, to obtain a true composite picture of cooperative activity.

The second goal was the gathering of a fairly large amount of statistical data from the central officers or member stations of the cooperative networks identified in the initial survey.

To meet these goals, a two-phase survey method was developed and implemented.

### THE POPULATION

The population for Phase I consisted of all broadcast radio stations, AM and FM, in the United States which were licensed by the Federal Communications Commission as

"noncommercial educational radio stations." Excepted were stations which were satellites, i.e., more than 90 percent of the program material was rebroadcast from another station.

At the time of the study, the population for Phase I was approximately 750 radio stations.

The population for Phase II consisted of the central officers of those cooperative program tape networks identified in Phase I. For those cases where a central officer was not identified or the network had no central officer, the program director of one of the member stations which responded to the initial questionnaire was included in the population.

## THE METHOD

### Phase I

A questionnaire was designed to gather the information needed in Phase I. A detailed description of this instrument is included in the instrumentation section of this chapter.

This questionnaire (referred to throughout this report as the initial questionnaire) was pretested on eight non-commercial radio stations in Minnesota, Wisconsin, and Illinois. Four of these stations were selected as representative members of a cooperative network, the Wisconsin Intercampus Radio Network. The other four were randomly selected. No major weaknesses were found in the pretest, which gave a 100% return rate. Data from the four randomly

selected stations were later added to, and analyzed with, the other data gathered in Phase I.

For the major survey, a sample was obtained which consisted of 199 noncommercial radio stations drawn from the population. Call letters and addresses of these stations were taken from the 1974 Broadcasting Yearbook.<sup>27</sup> For stations which went on the air following the publication of the Yearbook but prior to the survey (a period of more than a year), call letters and addresses were drawn from the weekly issues of Broadcasting magazine, which supplements the Yearbook. The sample was randomly selected by assigning consecutive numbers to the listing of stations within the population. The sample was then drawn using a table of random numbers.

One exception was made in the random selection process. It was desirable to involve at least one noncommercial radio station in each state in Phase I. This would provide a better opportunity to identify any network organizations which might be operating on a statewide basis. Four states were not included in the initial drawing of 199. The last four stations selected were therefore discarded. Four stations, one from each of the omitted states, were selected by applying the same random process to lists of all noncommercial radio stations in those states.

The initial questionnaire was mailed to the sampling

---

<sup>27</sup>Washington: Broadcasting Publications, Inc., 1974.



of 199 on March 28, 1975. A deadline of April 21, 1975 was set in the letter of transmittal for questionnaire return. After this deadline, a follow-up letter was sent to all non-respondents.

### Phase II

A more extensive questionnaire was designed to gather data for Phase II. A detailed description of this instrument (referred to throughout this report as the final questionnaire) is included in the instrumentation section which follows in this chapter.

Ten central officers of cooperative tape program networks, and eight program directors of member stations in networks with no central officers, received the final questionnaire. It was mailed on June 16, 1975, with a deadline date of July 1, 1975. After this deadline, a follow-up letter was sent to all nonrespondents.

## SURVEY INSTRUMENTS

### Phase I

The initial questionnaire instrument for Phase I, and its letter of transmittal; form Appendix A of this report.

The questionnaire began by asking for some general data on the station. Call letters and address were requested in order to make any corrections or changes in the Phase II mailing list. Also, data to be used in comparison between network participants and nonparticipants was requested in five categories. These were: (1) station effective radiated power, (2) population of coverage area, (3) number of

studio-control room production areas, (4) number of full-time, part-time, and volunteer staff members, and (5) station funding level. These categories were chosen as variables which might have an influence on whether or not a noncommercial radio station participated in a cooperative program tape network.

Question 1 was designed as a general introduction to the concept of cooperation in improvement, development, and sharing of station program material. Its purpose was primarily to separate out those stations which had no cooperative contacts with other stations, or cooperated only with National Public Radio members (through live networking) or with satellite stations. Those respondents who answered "No" to this question were asked to complete the opinionnaire section (questions 5 through 7), skipping questions 2, 3, and 4.

Question 2 served to directly identify those stations which were actively participating in cooperative program tape networks. It also served to identify the other member stations in the network by requesting their call letters and locations.

Question 3 asked directly whether or not the program exchange identified itself as a network. This was seen as a deciding factor which helped determine whether the exchange operation was considered an informal, temporary organization, or a formal, permanent organization.

Question 4 asked for the name and address of any central officer or administrator of the program tape exchange.

This information was used in implementing Phase II.

Questions 5, 6, and 7 were to be answered only by those respondents who were not participating in program tape exchanges.

Question 5 was a Likert-scale question which asked for a reaction to the statement, "Membership in a cooperative tape network on a regional basis would be beneficial to my station's programming." The options for response were: strongly agree, agree, no opinion, disagree, strongly disagree.

Question 6 was also a Likert-scale question which offered the same alternatives in response to the statement, "Membership in a cooperative tape network would probably impose a strain on my station's resources, staff, equipment, or finances." This problem, in consideration of the limited resources of many noncommercial stations, was seen as a deciding factor in whether or not a station might participate.

Question 7 asked the respondent whether he felt his station would have sufficient good quality locally produced material to contribute to a cooperative program tape network. "Sufficient material" was defined in the question as at least one half hour of programming weekly. A second section of this question was a request for the total number of locally produced recorded hours of program material aired weekly by the station.

A final section was provided for individual comments.

## Phase II

The final questionnaire-instrument for Phase II, and its letter of transmittal, form Appendix C of this report.

The questionnaire was divided into six sections. Five of these, A through E, corresponded to the five areas of study: structure, administration, funding, program content, and operational functions. The sixth section permitted comments and also asked for a listing of member stations in the networks under study.

Section A--Structure. Questions in this section were concerned with the number of stations participating in each network; the type of agreement used to organize the network; its lines of organization, whether regional, statewide, or by special programming needs or other variation; and the length of time the network had been in operation.

Section B--Administration. The single question was used to ascertain the exact method of administration for the network--whether by central administration, board of directors, an informal administrative arrangement involving all member stations, or other derivative.

Section C--Funding. The initial question in this section asked for a description of the contributions of member stations to the exchange effort. In a "true" cooperative, a station would contribute in-house costs only--those of production, duplication, and mailing of its own programs. The growth of further activities and an administrative structure might create costs above and beyond

in-house needs.

The remaining two questions dealt with any possible outside sources of funding, such as foundation or government grants, which might be used to support network activities.

Section D--Programming. The "balance" of network contributions was of concern here: whether all members of the exchange contributed equally in terms of number of hours of programming, or if the majority of programs were produced by one or two members. An average of the number of hours shared by stations weekly was requested.

One significant aspect of a network is its flexibility. Respondents were asked whether they felt the amount and types of programming exchanged by stations was formalized, with little variation, or if stations shared suitable programming on an informal basis, whenever it might become available.

The final topic in this section was the types of programming shared in the exchange: news, public affairs, recorded speeches, instructional programs, music, and others. Respondents were asked to mark all categories which applied.

Section E--Operations. The method of exchange was investigated here. Options might include round robin circulation, a one-to-one mailing of tapes from each station to all other member stations, or other variations. Shipping methods--parcel post, first class postal service, private parcel service, or others--were explored. Another question

was addressed to the shipping schedule used--whether on a weekly, monthly, variable, or other basis.

A final question asked respondents whether members of their network used other means for exchange of programs in addition to the tape exchange. Options included telephone lines, rebroadcasting of the signal from another station, microwave link, or other means.

Section F--Information and Comments. In addition to name, address, title, and comments of the respondent, it was requested that the call letters and location of network members be listed here. This served as a check upon the data provided by the member station in answering question 2 of the initial questionnaire. It was assumed that the central administrator of a network would have the most current information concerning membership.

#### RATE OF RETURN

##### Phase I

Two hundred and three randomly selected noncommercial radio stations (including the 4 randomly selected pretests) received the initial questionnaire. One hundred and one questionnaires were returned, giving a return rate of 49.6%. This was judged to be a satisfactory return, in consideration of the data requirements and the population composition.

##### Phase II

Eleven central administrators of cooperative networks identified in Phase I, and 7 program directors of stations

which responded as network members but named no administrator, received the final questionnaire. There were 14 respondents, giving a return rate of 77.8%. This also was judged to be a satisfactory return for the purposes of the study.

### DATA ANALYSIS PROCEDURES

Phase I data consisted of numbers of stations which were members and nonmembers of cooperative networks; baseline data concerning their effective radiated powers, populations of coverage areas, yearly funding levels, numbers of full- and part-time employees, and numbers of production areas; opinion data on a Likert scale concerning beneficiality of participation in networks, and demands placed on station resources by participation; and an indication of whether the amount of locally produced programming available was sufficient for network participation.

The initial step in analysis was the sorting of data into categories of network member and network nonmember. Total numbers in each case were determined, percentages calculated and tabulated.

Data in each of these two main categories was broken down according to the categories determined for analysis of each type of baseline data: effective radiated power, number of production areas, etc. Again, percentages were calculated and data tabulated.

The Likert-scale opinion data was treated by calculating the percentage responding to each level on the opinion scale. This data was also broken down for comparison purposes into two groups: those respondents which indicated that they did produce the weekly half hour of program material suitable for exchange participation, and those which indicated they did not.

The Phase II data consisted of baseline data on each network, such as numbers of members, number of years in operation: and total number of networks responding in certain categories to questions regarding structure, administration, funding; programming, and operational functions. Since numbers were relatively small--there were 10 useable responses--this data was simply tabulated and presented.



## Chapter 4

### PRESENTATION AND ANALYSIS OF DATA

Data collected during the study is presented and analyzed under sections corresponding to Phase I and Phase II of the study.

The first topic discussed under Phase I is that of the overall percentages of members and nonmembers of cooperative program tape networks identified in the random survey, and the number of networks in which they participated.

The second topic is that of comparisons between stations which were members and stations which were nonmembers. Points of comparison were the FCC power classification of stations; population of coverage areas; yearly funding level; number of production areas; and number of full- or part-time staff members.

The third topic is that of nonmember program director reaction to the statement, "Membership in a cooperative tape network on a regional basis would be beneficial to my station's programming," as measured on a Likert scale. The overall reaction of all nonmember stations, and the reaction categorized according to the availability of programming produced locally which would be suitable for exchange with

other stations, is presented and analyzed.

The fourth topic is that of nonmember program director reaction to the statement, "Membership in a cooperative tape network would probably impose a strain on my station's resources, staff, equipment, or finances," as measured on a Likert scale. Reactions are analyzed through comparison with those points given for the third topic.

Under Phase II, the data gathered from functioning cooperative program tape networks is presented and analyzed according to the five areas judged to represent significant aspects: structure, administration, funding, programming, and operational functions.

## PHASE I

### General Results: Membership In Networks

The 101 responses to the initial questionnaire included those of two radio stations which stated that they were not yet operating on the air. These returns were discarded as not relevant, leaving a data base of 99 responses.

Twenty-three of the respondents indicated, by answering "yes" to questions 1 and 2, that they were participating in cooperative program tape networks with other noncommercial radio stations. Of these, one station later disqualified itself in Phase II, indicating in its response that its involvement did not meet the definition of a cooperative tape network as used in the study. This left 22, or 22.2% of the respondents, as network members; 77, or

77.8%, were nonmembers.

Thirteen of the nonmembers, or 13.1% of the total, indicated that other cooperative efforts were carried on in development or promotion of programming.

#### Comparison of Characteristics: Members and Nonmembers

Radiated Power. In Table 1, data on station effective radiated power, in watts, is compared. A breakdown according to FCC power classification was chosen as the best means for comparison. Class D stations have a transmitter output power of 10 watts and an effective radiated power which is generally less than 100 watts; these are designated to serve a campus or neighborhood. Class A stations have an effective radiated power of up to 3,000 watts; they serve a community, city, or town and a limited surrounding rural area. Class C stations, with from 3,000 to 100,000 watts of power, are to serve a community, city, or town and a large surrounding rural or suburban area--which may include other cities and towns.<sup>28</sup>

In this and all tables which follow, numbers in parentheses represent the actual number of stations in each category.

---

<sup>28</sup>U.S., Federal Communications Commission, Rules and Regulations, Vol. III, Subpart C, Sec. 73.206 and 73.504, (Washington: U.S. Government Printing Office, 1968).

Table 1

COOPERATIVE NETWORK MEMBER VS. NONMEMBER RESPONDENTS  
CATEGORIZED ACCORDING TO EFFECTIVE RADIATED  
POWER CLASSIFICATION

Classification	Members		Nonmembers	
Class C: 3,000-100,000 watts	(7)	31.8%	(20)	26.0%
Class A: 10-3,000 watts	(7)	31.8%	(20)	26.0%
Class D: 10 watts	(8)	36.4%	(36)	46.7%
No Response	(0)	0.0%	(1)	1.3%
Totals:	(22)	100.0%	(77)	100.0%

It is apparent that proportionately fewer low power Class D radio stations were found among network members (36.4%) as compared to nonmembers (46.7%) among the respondents.

Population of Coverage Area. In Table 2, comparison is made according to the population of station coverage area, as provided by the respondents. This data was broken down in four categories: less than 50,000 people, 50,000 to 250,000, 250,000 to 1 million, and a potential audience of greater than 1 million.

Table 2

COOPERATIVE NETWORK MEMBER VS. NONMEMBER RESPONDENTS  
CATEGORIZED ACCORDING TO POPULATION OF COVERAGE AREA

Coverage	Members	Nonmembers
Less than 50,000	(4) 18.2%	(16) 20.8%
50,000 - 250,000	(7) 31.8%	(21) 27.3%
250,000-1,000,000	(6) 27.3%	(16) 20.8%
More than 1,000,000	(4) 18.2%	(18) 23.3%
No Response	(1) 4.5%	(6) 7.8%
Totals:	(22) 100.0%	(77) 100.0%

No real trends are apparent here. A slightly larger proportion of the member stations fall in the 250,000 to 1 million range; a slightly larger proportion of the nonmembers cover an area of more than 1 million people. Otherwise, percentages in each category are quite similar.

Funding level. The significance of funding levels lies in the ability of a noncommercial radio station to support production activity which results in program material to contribute to a program cooperative; also, its ability to purchase, rent, or produce programming for its own needs. In Table 3, members and nonmembers are compared on five yearly funding levels: less than \$1,000, \$1,000-\$5,000, \$5,000-\$10,000, \$10,000-\$20,000, and more than \$20,000 yearly.

Table 3

COOPERATIVE NETWORK MEMBER VS. NONMEMBER RESPONDENTS  
CATEGORIZED ACCORDING TO YEARLY FUNDING LEVEL

Funding level	Members		Nonmembers	
Less than \$1,000	(2)	9.1%	(7)	9.1%
\$1,000-\$5,000	(8)	36.4%	(17)	22.0%
\$5,000-\$10,000	(1)	4.5%	(16)	20.8%
\$10,000-\$20,000	(1)	4.5%	(14)	18.2%
More than \$20,000	(10)	45.5%	(21)	27.3%
No Response	(0)	0.0%	(2)	2.6%
Totals:	(22)	100.0%	(77)	100.0%

A substantially higher percentage of network members than nonmembers are receiving over \$20,000 per year; and a higher percentage also fall into the \$1,000 to \$5,000 yearly range. Few network members are found among stations in the \$5,000 to \$20,000 ranges.

Staff members. Full- and part-time staff members represent a resource that, like funds, may determine a station's ability to participate in a cooperative. These were broken down into five categories: no employees, 1 to 3 employees, 4 to 7 employees, 8 to 11 employees, and more than 11 employees. Comparisons are made in Table 4.

Table 4  
 COOPERATIVE NETWORK MEMBER VS. NONMEMBER RESPONDENTS  
 CATEGORIZED ACCORDING TO NUMBER OF FULL- AND  
 PART-TIME EMPLOYEES

	Members		Nonmembers	
None	(4)	18.2%	(19)	24.7%
1 to 3	(4)	18.2%	(27)	35.0%
4 to 7	(4)	18.2%	(18)	23.4%
8 to 11	(3)	13.6%	(2)	2.6%
12 or more	(7)	31.8%	(10)	13.0%
No Response	(0)	0.0%	(1)	1.3%
Totals:	(22)	100.0%	(77)	100.0%

It may be seen that considerably more member stations than nonmembers have 8 or more full- or part-time employees-- about 45% compared to 15%. Conversely, more nonmembers than members fall into the categories of 7 or fewer employees-- about 58% compared with 36%. And, more nonmembers have no paid employees than members--24.7% compared with 18.2%

Program Production Areas. The number of program production areas--studio-control room combinations--available for use at the stations under study was the final point of comparison. Data was broken into categories of one area, two areas, and three or more areas. This data appears in Table 5.

Table 5

COOPERATIVE NETWORK MEMBER VS. NONMEMBER RESPONDENTS  
CATEGORIZED ACCORDING TO NUMBER OF AVAILABLE  
PRODUCTION AREAS

Number of Production Areas	Members		Nonmembers	
One	(5)	22.8%	(9)	11.7%
Two	(10)	45.4%	(33)	42.8%
Three or more	(6)	27.3%	(33)	42.8%
No Response	(1)	4.5%	(2)	2.7%
Totals:	(22)	100.0%	(77)	100.0%

Proportionately, more members than nonmembers had only one production area; but in both cases, this was a small percentage of the total. Most of the members had two production areas; while among the nonmembers, percentages were evenly divided between two production areas and three or more areas.

Nonmember Opinions Concerning Benefits of Network Membership

In this section, the responses given by program directors of nonmember stations to the statement, "Membership in a cooperative tape network on a regional basis would be beneficial to my station's programming," are analyzed. Table 6 shows the overall response to that statement, with 73 of 77 stations responding.



Table 6

OVERALL REACTION OF NONMEMBERS TO  
BENEFICIALITY STATEMENT

"Membership in a cooperative tape network on a regional basis would be beneficial to my station's programming."					
Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
(27) 35.1%	(34) 44.1%	(8) 10%	(3) 3.9%	(1) 1.3%	(73) 94.8%
No Response: (4) 5.2%					

Response to this question was overwhelmingly favorable; only 15.6% of all respondents did not answer in the affirmative.

Stations which were not members of cooperative program tape networks were asked in the survey to indicate whether they felt that their station produced sufficient good quality programming suitable for sharing with others in an exchange. "Sufficient good quality programming" was defined as one-half hour per week. Responses to this question (yes or no) are compared with the responses concerning beneficiality of participation in Table 7. Of those 73 stations responding to the questionnaire, 7 did not indicate whether they did or did not produce sufficient material for participation, and thus do not appear in this table. Sixty-six nonmember responses are represented.

Table 7

REACTIONS OF NONMEMBERS TO BENEFICIALITY STATEMENT:  
CATEGORIZED ACCORDING TO AVAILABILITY OF  
PROGRAM MATERIAL FOR PARTICIPATION

Sufficient Material for Participation	"Membership in a cooperative tape network on a regional basis would be beneficial to my station's programming"					
	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Totals
Yes	(22) 51.2%	(18) 41.9%	(1) 2.3%	(2) 4.6%	(0)	(43) 100.0%
No	(6) 26.1%	(12) 52.1%	(3) 13.0%	(1) 4.3%	(1) 4.3%	(23) 100.0%

Over 93% of those program directors whose stations had sufficient local production to participate responded in the affirmative. Among those without sufficient production, only 26.1% strongly agreed with the statement; however, 52.2% responded in the "agree" column, giving an overall affirmative response of over 78%.

Nonmember Opinions Concerning Demands of Network Membership

In this section, the responses given by program directors of nonmember stations to the statement, "Membership in a cooperative tape network would probably impose a strain on my station's resources, staff, equipment, or finances," are analyzed. Table 8 shows the overall response to that statement, with 73 of 77 nonmember stations responding.

Table 8

OVERALL REACTION OF NONMEMBERS TO STATEMENT  
ON IMPOSITIONS OF PARTICIPATION

"Membership in a cooperative tape network on a regional basis would probably impose a strain on my station's resources, staff, equipment or finances"					
Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
(2) 2.6%	(23) 29.9%	(16) 20.8%	(27) 35.1%	(5) 6.4%	(73) 94.8%
No Response: (4) 5.2%					

Opinion in this case was fairly divided; 25 stations (32.5%) answered in the affirmative, 32 stations (41.6%) disagreed, while 16 (20.8%) gave no opinion.

This data was also broken down into two groups; those stations which indicated that they did have sufficient material for participation, and those stations which did not. This breakdown is shown in Table 9, with responses from 66 nonmember stations represented.

Table 9

REACTIONS OF NONMEMBERS TO STATEMENT ON IMPOSITIONS OF PARTICIPATION: CATEGORIZED ACCORDING TO AVAILABILITY OF PROGRAM MATERIAL FOR PARTICIPATION

Sufficient Material for Participation	"Membership in a cooperative tape network on a regional basis would probably impose a strain on my station's resources, staff, equipment or finances"					
	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Total
Yes	(1) 2.3%	(14) 32.6%	(4) 9.3%	(21) 48.8%	(3) 7.0%	(43) 100.0%
No	(1) 4.4%	(8) 34.8%	(9) 39.1%	(3) 13.0%	(2) 8.7%	(23) 100.0%

Those with sufficient material showed a greater tendency to disagree, mildly or strongly; most of those without sufficient material gave no opinion or agreed that resources would be taxed by network participation.

## PHASE II

### General Response

There were 14 respondents to the final questionnaire. Of these, 8 were central administrators or directors of cooperative networks, and 5 were program directors of stations identified in Phase I as members of cooperative networks. One questionnaire was returned by a person who had been identified in Phase I as a central administrator, but who indicated in Phase II that his organization did not fit the definition of a cooperative tape network as used in the study.

One program director indicated that his network (a proposed public radio tape exchange in New Jersey which was in the planning stages in Phase I) had since been abandoned.

Two respondents (KRAB, Seattle, Washington, and the Minority Affairs Tape Exchange, Cincinnati, Ohio) stated that their exchange organizations were very informal, with no fixed number of member stations, mailing schedules, organizational lines, or other established structure.

Data provided by the remaining 10 respondents is given in the sections which follow. In each section, com-

parison is made between overall numbers in terms of different administrative methods, types of programming exchanged, means of shipping of program material, and other significant characteristics.

### Structure

Table 10 shows the total number of member stations participating in each of the networks studied.

Table 10

#### NUMBER OF MEMBER STATIONS IN NETWORKS SURVEYED

Number of Member Stations	2	3	4	6	8	10	11	18
Number of Networks	1	1	2	1	1	2	1	1

Seven of the networks had been in operation for three years or less; the other three had been operating for 10, 14 and 18 years.

Plans of network organization are shown in Table 11.

Table 11

#### PLANS OF ORGANIZATION FOR NETWORKS SURVEYED

Basis	Number of Networks
Statewide	4
Similar Program Philosophy	3
Regional basis--beyond state boundaries	2
Regional basis--region within a state	1

Statewide organization was the prevalent trend, with organization by similar program philosophy also utilized by a number of networks.

Table 12 exhibits the types of instruments of organization used by the networks in the survey group.

Table 12

INSTRUMENTS OF ORGANIZATION USED  
BY NETWORKS SURVEYED

Instrument	Number of Networks
Written objectives or constitution	4
Verbal, unwritten agreement	3
Combined verbal and contract agreements	1
Combined verbal agreements and written objectives	1
Contract	1

Most notable here is the comparatively large number of networks operating with unwritten agreements, in whole or part.

#### Administration

Five of the networks responding had a central administrator--variously called a president, secretary, or manager--to oversee cooperative activities. Four indicated that they had no central administrator, but that the network was managed by people at each member station. As a

variation of this, one network had a board of directors to oversee operations, with representatives from each member station.

### Funding

The majority of respondents--seven--indicated that their financial involvement with the network organization was to the extent only of paying costs for production and duplication of their own tapes for others to use. Three networks had additional charges for member stations to support administrative and other cooperative activities.

Three networks were receiving outside funding. One obtained costs of tape and shipping from a state agency; another received private and foundation grants through a religious organization with which its stations were affiliated; the third was receiving grants from the state arts council for production and distribution of a specific program.

### Programming

Only two of the ten respondents stated that the amount of programming exchanged by their members was fixed, with little variation. All others had a flexible exchange schedule, with stations sharing suitable programming as it became available. One of the two networks involving fixed amounts indicated that all of its members (two stations) exchanged equal amounts of programming. The larger networks all indicated that one or two stations produced the bulk of

the programs, with the other members contributing only a minor amount to the exchange.

The types or programming exchanged by network members in the study group are shown in Table 13.

Table 13

TYPES OF PROGRAMMING EXCHANGED BY NETWORK MEMBERS

Programming Categories	Number of Networks
Music-Entertainment or Information	8
Recorded speeches	5
News	3
Public Affairs	3
Live Music Recordings	2
Religious Discussion	1
Arts Program	1
Drama	1
Comedy and Other Entertainment	1

Music programs were most prevalent, with eight networks involved in exchange of music or music-oriented programming. Recorded speeches, public affairs, news and live music recordings were also shared by members of two or more networks.

Operational Functions

Plans of distribution for tapes exchanged in networks are shown in Table 14.



Table 14

## DISTRIBUTION PLANS UTILIZED BY NETWORKS SURVEYED

Distribution Plan	Number of Networks
One-to-one	6
Round Robin	2
Central Duplication and distribution	2

One-to-one distribution--each station duplicating and shipping copies to all member stations--was the method most widely used.

Methods of tape shipment used by the networks are shown in Table 15.

Table 15

## TAPE SHIPMENT METHODS USED BY NETWORKS SURVEYED

Shipment Method	Number of Networks
Postal Service--4th Class	4
Postal Service--1st and 4th Class	2
Postal Service--1st and 4th Class and private Parcel Service	2
Postal Service--1st Class	1
Private Parcel Service	1

Eight of the ten networks used fourth class parcel post service, four of those using it exclusive to other methods. Two used both first and fourth class mail service; two used these methods and also private parcel services.

Six networks used a weekly shipping basis for tape distribution; the remaining four utilized a variable schedule, with members shipping program tapes to other members on demand.

Seven of the ten networks also used other means of exchanging program material in addition to tape. Three made use of telephone line interconnection; three others used off-air reception and rebroadcast of the signals from nearby network members. One used a combination of rebroadcast, telephone line interconnection, and microwave interconnection of stations.

## Chapter 5

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### SUMMARY

##### The Problem

The problem of this study was the lack of meaningful documentation of cooperative program tape network activities between noncommercial radio stations.

##### The Purpose.

The study sought to establish a general overview of characteristics relating to cooperative program tape networks and their member stations. It also sought to obtain an opinion sampling from program directors of nonparticipating stations concerning the benefits and demands of participation. From this data, conclusions were to be drawn concerning the viability of the cooperative network as a programming method.

##### The Method

The study was carried out through a review of related literature and a two-phase survey. Phase I involved a nationwide sampling of noncommercial radio stations which identified network members, gathered data on significant

aspects of member and nonmember stations which might influence participation, and obtained the opinion sampling from nonparticipant station program directors regarding attitudes toward participation. Phase II gathered data on significant aspects of the networks identified in Phase I from their central administrators or member stations. Data was tabulated, percentages calculated, and comparisons were made.

### Findings

Through the literature review it was found that cooperative exchanges of program material, through tape or other means, have been attempted and practiced by noncommercial radio stations since the founding of the medium in the 1920s and 1930s. Despite the establishment of a nationwide live network of noncommercial stations in 1970, tape networks continue to operate, and new networks continue to develop. Special programming needs, the unavailability of live NPR service to many noncommercial stations, the high cost of subscription program material, and the low levels of funding at many stations, all contribute to the need for cooperative program tape networks. This need may be expected to continue into the future.

Of those noncommercial radio stations responding to the initial, nationwide survey, 22.2% were members of cooperative program tape networks. Stations which were participating in networks generally had higher power and

more full- or part-time employees than nonmember stations. Forty-five percent of all member stations received more than \$20,000 in funds yearly, while 36% received from \$1,000 to \$5,000 in funds.

Program directors of stations which were not participating in network activities indicated overwhelmingly that they felt such participation would be beneficial for their stations' programming. Over 90% of those whose stations had sufficient locally produced programming for exchange participation responded positively. Of those whose present local production was judged insufficient, 78% still felt that participation would be beneficial.

Opinion was divided as to whether such participation would impose a strain on the facilities or resources of the responding stations. Overall, 32.5% indicated that some strain would be anticipated, while 41.6% expected no real demands. A large proportion--20.8%--had no opinion.

Certain characteristics were identifiable among those networks surveyed in the second phase of the study. Numbers of member stations ranged from 2 to 18, with most having less than 10 member stations. Statewide organization was most widely used--by 4 out of 10 networks. Seven of the networks had written agreements to exchange, in whole or part, while three had only verbal agreements. Management by central administrator and management by persons at each member station were nearly equally prevalent as methods.

Seven of 10 networks contributed only in-house production, duplication, and shipping costs to the exchange. Only 3 of 10 were receiving funding from sources outside the member stations.

Most networks used a flexible exchange schedule. A wide variety of program types were exchanged. Music information and music entertainment programs were foremost, with 8 of 10 networks exchanging this type. Recorded speeches were exchanged in 5 networks; news, and public affairs programs, in 3.

Six of the 10 networks used the one-to-one method of tape distribution; two networks had central tape duplication facilities. Fourth class postal service was the most prevalent shipping method, but a significant proportion of the networks surveyed used more than one method, resorting to first class mail or private parcel service on occasion. Weekly distribution of tapes was the prevalent method. Seven of the 10 networks were also using other means for live interconnection of stations to share programming. These methods included rebroadcast, telephone line interconnection, and microwave interconnection.

#### CONCLUSIONS

The cooperative program tape network is an integral part of present-day noncommercial radio. A large proportion of those stations surveyed nationwide were participating in cooperative networks. A large majority of those which were

not involved felt that such participation would be beneficial to their programming. The greater proportion of those networks which were studied had been in operation for three years or less, demonstrating that the cooperative network remains a useful tool for the noncommercial radio program director. The smaller group which had been in operation for ten years or more showed proof that the cooperative network could become a stable, lasting element of the medium.

Among those elements which could affect a station's ability to participate in a cooperative network--and the willingness of its staff to do so--funding would seem to be foremost. Participants studied generally had higher power, and more full- or part-time staff members; both of these are variables which are dependent on station funding levels. Network members were found primarily among two categories: those having a funding level greater than \$20,000 annually, and those receiving from \$1,000 to \$5,000. A probable explanation is that the stations in the high funding range could support a strong local production program and thus would find cooperative participation a relatively small demand on station resources. The stations in the lower range probably could not support a large local production effort, and relied on the cooperative network as an inexpensive source of programming, gaining more programming from cooperation than was contributed to the exchange. In eight of ten networks studied, stations did not contribute equally

to the exchange effort; this implies a situation such as that observed above.

The characteristic of those networks studied would seem to be flexibility. Distribution methods, network organization, and administration were generally kept simple, and could be changed to meet varying situations and objectives. Statewide organization, as through a university system or public broadcaster's association, was most prevalent. However, several networks indicated that they had grown up to serve a specialized programming need, such as a statewide arts program or religious programming. This enhances the implication found in the literature review: that special programming needs provide a niche which only the cooperative network can fulfill successfully. Despite the flexibility of the networks, organization was shown to be important, and a majority of those surveyed had an established exchange agreement or organizational structure.

The tendency for network members to share program material through live interconnection as well as tape networking was unexpected. Live interconnect methods have generally been beyond the reach of the noncommercial broadcaster: rebroadcast, due to low station power and long distances between stations; microwave and telephone lines, due to high cost. Technical advances and federal funding have made such interconnection more feasible in recent years; budgetary limitations have, at the same time, reduced



feasibility in many cases. This live interconnection has, apparently, not eliminated the need for tape exchange, just as the need remained after the establishment of National Public Radio. Quality of transmission, the scheduling problems imposed by live interconnection, and the inability to localize live program material provide reasons for the continuance of tape exchange activities. In consideration of these factors, the cooperative program tape network may be foreseen as an integral part of the future of noncommercial broadcasting, as well as of its present.

#### RECOMMENDATIONS

This study has demonstrated a high interest among program directors of noncommercial radio stations toward the cooperative program tape network concept. Accordingly, efforts toward such cooperation and sharing of resources should be considered by station management as a viable method of programming. Cooperation should be explored, and undertaken wherever it is determined to be practical and beneficial.

In the development of a cooperative network, successful methods and practices used by networks currently in operation should be used whenever appropriate. A number of these are revealed in the course of this study. Attention should also be given to the problem areas which have been identified. Contact with administrators and member stations

of operating networks could prove invaluable; those which participated in this study are listed in Appendices D and E.

A logical step beyond the general overview provided by this study would be in-depth research designed to identify all cooperative program tape networks in the United States, and ascertain common characteristics. A nationwide directory of cooperative networks could follow. The main difference between this and the present study would be a more comprehensive survey of all noncommercial radio stations; the present survey sampled about 1/4 of the population and had a return near 50%. In view of the high interest in cooperative program tape networks exhibited during the course of this study, further research could prove very beneficial toward successful network development.

## BIBLIOGRAPHY

- Campus News, Billboard, January 5, 1975, p. 12.
- Campus News, Billboard, March 9, 1974, p. 12.
- Broadcasting Yearbook. 1974 ed. Washington: Broadcasting Publications, Inc., 1974.
- Cooper, Isabella M. Bibliography on Educational Broadcasting. Chicago: University of Chicago Press, 1942 (reprinted, 1971).
- Fellows, James A., and John P. Witherspoon. Educational Communications Systems: Phases I & II. Washington: National Association of Educational Broadcasters, 1965.
- Forsythe, Richard O. Instructional Radio: A Position Paper. Stanford, California: ERIC Clearinghouse on Media and Technology, 1970.
- Land Associates, Incorporated. The Hidden Medium: A Status Report on Educational Radio in the United States. Washington: National Educational Radio, 1967.
- Matthews, Arthur C. Personal Interview. Menomonie, Wisconsin. April 3, 1975.
- Milam, Lorenzo W. Sex and Broadcasting: A Handbook on Starting a Radio Station For The Community. 2nd ed. Los Gatos, California: KTAO, 1972.
- Mott, Robert A. "Some Disadvantages of a Live Radio Network," NAEB Journal, XXV (March-April, 1966), pp. 2-6.
- National Association of Educational Broadcasters. Radio's Role in Instruction. Report and Recommendations of the Instructional Task Force of National Educational Radio. Washington: NAEB, 1972.
- Newman, Marjorie. "Five Minute Radio Programs," Educational Broadcasting Review, IV (June, 1970), pp. 69-71.
- Peterson, Gary T. "Networking and Audiovisual Materials," Audiovisual Instruction, XX (March, 1975), pp. 15-18.

- Platts, David E. "Current Status of State-Wide Educational Radio Networks," Educational Broadcasting Review, II (June, 1968), pp. 37-44.
- Siebert, Warren F. "Broadcasting and Education: ERIC/EBR Annual Review Paper," Educational Broadcasting Review, VI (June, 1972), pp. 139-150.
- Simkins, Tanya. "Public Radio: Coming Out of Hiding," Educational Broadcasting, (May/June 1974), pp. 15-19.
- Singh, Jai P., and Robert P. Morgan. Educational Electronic Information Dissemination and Broadcast Services: History, Current Infrastructure, and Public Broadcasting Requirements. St. Louis: Washington University Internal Memorandum #71/3, August 9, 1971. ERIC Document ED 055 419.
- U.S., Department of Health, Education, and Welfare. Summary Statistics of CPB-Qualified Public Radio Stations, Fiscal Year 1972 by Ronald J. Pedone, et al. Washington: U.S. Government Printing Office, 1973.
- U.S., Federal Communications Commission. Rules and Regulations. Volume III. Washington: U.S. Government Printing Office, 1968.
- Young, Elizabeth C. "Public Radio in the Seventies," Educational Broadcasting Review, IV (December, 1970), pp. 47-52.

APPENDIX A

Initial Questionnaire and Letter of Transmittal

## COOPERATIVE RADIO TAPE EXCHANGE SURVEY-Spring, 1975

Return to: Peter Nordgren  
 WVSS-FM  
 University of Wisconsin-Stout  
 Menomonie, Wisconsin 54751

## GENERAL DATA:

Station Call Letters: \_\_\_\_\_ Effective Radiated Power: \_\_\_\_\_

Address: \_\_\_\_\_

Population of coverage area: \_\_\_\_\_ Number of production areas: \_\_\_\_\_  
 (studio-control room)

Number of staff members: full-time \_\_\_\_\_ part-time \_\_\_\_\_ volunteer \_\_\_\_\_

Station funding level: less than \$1000/year \_\_\_\_\_ \$1000-\$5000/year \_\_\_\_\_  
 \$5000-10,000/year \_\_\_\_\_ \$10,000-20,000/year \_\_\_\_\_  
 More than \$20,000/year \_\_\_\_\_

1. Does your radio station carry on cooperative efforts with other noncommercial radio stations which are specifically directed at improvement, development, or sharing of program material (excluding involvement with National Public Radio or with satellite stations)?

( ) Yes ( ) No

If the answer to 1 is No, go to question 5.

2. Specifically, does your station engage in cooperative exchanges of programs or program material with other stations?

( ) Yes ( ) No

If the answer to 2 was Yes, list below the call letters and locations of stations with which you exchange programs or program material on tape.

3. Does your exchange identify itself as a network?

( ) Yes ( ) No

If your network or exchange has a name, please list it below.

4. If your network or exchange has a director, administrator, or other central officer in charge of its functions, please list his name, title, and address. Add any comments on the back of this page, sign, and return. You do not have to complete questions 5-7.

5. Membership in a cooperative tape network on a regional basis would be beneficial to my station's programming.

Strongly Agree      Agree      No Opinion      Disagree      Strongly Disagree





UNIVERSITY OF WISCONSIN-STOUT  
MENOMONIE, WISCONSIN  
54751

WVSS-FM Radio  
March 21, 1975

To: Program Directors  
Noncommercial Radio Stations

Your station has been chosen to participate in a study of program exchanges between noncommercial radio stations in the United States. Enclosed is a survey which can be returned, postage free, by April 21, 1975.

As the programmer of a noncommercial radio station (a term which encompasses all of us who consider ourselves "educational", "instructional", or "public"), you're no doubt aware that you have a complex problem. You need to fill broadcast hours with high quality programming, suited to the needs of your listening audience, within the limitations of your budget and the capabilities of your staff.

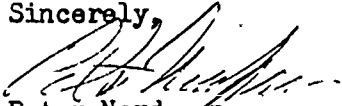
Cooperative program exchanges represent one possible means for stations with limited resources to obtain suitable program material. Here in Wisconsin, ten stations in the University of Wisconsin System began an exchange network two years ago. We are interested in finding out how much of this type of activity is going on elsewhere; also, in learning some aspects of those exchanges now in operation.

For the purpose of this study, a noncommercial radio program tape exchange is defined as any system by which two or more noncommercial radio stations share self-produced program material through exchange of audio tapes without financial consideration.

Those of you who are presently involved in program exchanges may expect further contact from me, by mail or phone, following return of the survey.

Results of this study will be used to complete my requirements for the M.S. degree in Audiovisual Communications. I intend also to seek publication of the final report in either ERIC or a journal such as Public Telecommunications Review. I feel that the results will prove informative to staff members at many stations.

Sincerely,

  
Peter Nordgren  
WVSS-FM Radio

Enclosure



APPENDIX B

Mailing List for Initial Questionnaire

Noncommercial radio stations which received the initial questionnaire are listed alphabetically by state. The symbol \* following an address indicates a nonrespondent to the questionnaire. All questionnaires were addressed to the Program Director.

## ALASKA

KUAC-FM  
University of Alaska  
Fairbanks, AK 99701

KCHO-FM  
Mass Communications Dept.  
California State University  
Chico, CA 95926

## ALABAMA

WVSU (FMP \*  
Samford University  
800 Lakeshore Drive  
Birmingham, AL 35209

KSPC (FM) \*  
Pomona College  
Claremont, CA 91711

## ARIZONA

KAXR-FM \*  
Northern Arizona U.  
Box 5783  
Flagstaff, AZ 86001

KUSC (FM)  
University of Southern CA  
Los Angeles, CA 90007

## KMCR-FM

524 W. Washington  
Phoenix, AZ 85003

KXLU (FM)  
Loyola University  
7171 W. 80th Street  
Los Angeles, CA 90045

KBDR (FM)  
Merced Community College  
3600 M Street  
Merced, CA 95340

## ARKANSAS

KASU (FM)  
Box 4B  
Arkansas State U.  
Jonesboro, AR 72467

KUCR-FM \*  
691 Linden Street  
Riverside, CA 92507

## CALIFORNIA

KHSU-FM  
Humboldt State College  
Arcata, CA 95521

KUSF (FM)  
University of San Francisco  
San Francisco, CA 94134

KALX (FM)  
Eshleman Hall  
University of California  
Berkeley, CA 94720

KQED-FM \*  
1011 Bryant Street  
San Francisco, CA 94103

KCPR (FM)  
California Polytechnic  
State University  
San Luis Obispo, CA 94301

KUSP (FM) \*  
Santa Cruz, CA 95061

KBBF (FM)  
4010 Finley Avenue  
Santa Rosa, CA 95401

KSJC (FM)  
3301 Kensington Way  
Stockton, CA 95204

KNHS (FM)  
3620 W. 182nd Street  
Torrance, CA 90504

KVIK (FM)  
Vanden High School  
Travis A.F.B. CA 94535

#### COLORADO

KEPC (FM)  
El Paso Community College  
Colorado Springs, CO 80904

#### CONNECTICUT

WGCT (FM) \*  
Guilford, CT 06437

WMNR (FM) \*  
1014 Monroe Turnpike  
Monroe, CT 06468

WFCS (FM)  
Central Connecticut  
State College  
New Britain, CT 06032

WWUH (FM)  
200 Bloomfield Ave.  
University of Hartford  
Hartford, CT 06117

WVOF (FM)  
Fairfield University  
Fairfield, CT 06430

#### DELAWARE

WMPH (FM) \*  
Washington St. exit & Marsh Rd.  
Wilmington, DE 19809

#### DISTRICT OF COLUMBIA

WAMU (FM)  
American University  
Washington, DC 20016

#### FLORIDA

WHRB (FM) \*  
505 S. Congress Ave.  
Boynton Beach, FL 33435

WAFG (FM) \*  
Westminster Academy  
Ft. Lauderdale, FL 33301

WMCU (FM) \*  
Miami Christian College  
Box 370  
Miami, FL 33168

WPCS (FM) \*  
125 E. John St.  
Pensacola Christian School  
Pensacola, FL 32503

WFSU-FM \*  
420 Diffenbaugh Bldg.  
Florida State University  
Tallahassee, FL 32306

WUSF (FM)  
4202 Fowler Ave  
University of South Florida  
Tampa, FL 33620

#### GEORGIA

WABE (FM) \*  
740 Bismarck Rd., NE  
Atlanta, GA 30324

WACG (FM) \*  
Augusta College  
Augusta, GA 30904

WVVS (FM)  
Box 142  
Valdosta State College  
Valdosta, GA 31601

## HAWAII

KTUH (FM)  
2500 Campus Rd.  
University of Hawaii  
Honolulu, HI 96822

## IDAHO

KUID-FM \*  
Radio-TV Center  
U. of Idaho  
Moscow, Idaho 83843

KBGL (FM)  
Dept. of Radio-TV  
Idaho State U.  
Pocatello, ID 83201

## ILLINOIS

WSIU-FM \*  
Southern Illinois University  
Carbondale, IL 62901

WJMU (FM) \*  
Millikin University  
Decatur, IL 62523

WHSD (FM) \*  
55th & Grant Sts.  
Hinsdale Township HS  
Hinsdale, IL 60521

WONC (FM)  
North Central College  
Naperville, IL 60540

WBEZ (FM)  
228 N. La Salle St.  
Chicago, IL 60601

WRSE (FM) \*  
190 Prospect Ave.  
Elmhurst College  
Elmhurst, IL 60126

WJVC (FM)  
Illinois Eastern Jr. College  
2200 College Dr.  
Mt. Carmel, IL 62863

## INDIANA

WVPE (FM) \*  
2424 California Rd.  
Elkhart, IN 46514

WEVC (FM) \*  
Box 329  
University of Evansville  
Evansville, IN 47714

WBDG (FM) \*  
1200 N. Girls School Rd.  
Indianapolis, IN 46224

WJJE (FM) \*  
1801 S. 18th St.  
Lafayette, IN 47905

WECI (FM) \*  
Box 1239  
Earlham College  
Richmond, IN 47374

WETL (FM)  
635 S. Main Street  
South Bend, IN 46623

WVUB (FM)  
Vincennes University  
Vincennes, IN 47591

WHFG (FM) \*  
Whites Indiana Manual Training Inst.  
Wabash, IN 46992

## IOWA

WOI-FM  
Iowa State University  
Ames, IA 50010

KCKK (FM)  
Kirkwood Community College  
Cedar Rapids, IA 52406

KHKE (FM)  
University of Northern Iowa  
Cedar Falls, IA 50613

KICB (FM) \*  
Iowa Central Community College  
Ft. Dodge, IA 50501

KNWS (FM) \*  
4880 La Porte Rd.  
Waterloo, IA 50702

## KANSAS

KHCC (FM)  
Hutchinson Community College  
Hutchinson, KS 67501

KSAC (AM)\*  
Kansas State University  
Manhattan, KS 66506

KJTO (FM) \*  
Ottawa University  
Ottawa, KS 66067

KMUW (FM)  
Wichita State University  
Wichita, KS 67208

KSWC (FM) \*  
Southwestern College  
Winfield, KS 67158

## KENTUCKY

WRVG (FM) \*  
Georgetown College  
Georgetown, KY 40324

WKCC (FM)  
Kentucky Christian College  
Grayson, KY 41143

WKMS (FM)  
Box 1175, Uni. Station  
Murray State University  
Murray, KY 42071

WEKU (FM)  
Eastern Kentucky University  
Richmond, KY 40475

## LOUISIANA

KSLU (FM)  
Southeastern Louisiana U.  
Hammond, LA 70401

WTUL (FM)  
Tulane University  
New Orleans, LA 70119

KLPI (FM)  
Louisiana Tech University  
Ruston, LA 71270

## MAINE

WRJR (FM) \*  
Bates College  
Lewiston, ME 04240

## MARYLAND

WBJC (FM) \*  
2901 Liberty Hts. Ave.  
Baltimore, MD 21215

WSPH (FM)  
7400 N. Old Point Rd.  
Baltimore, MD 21219

## MASSACHUSETTS

WFCR (FM) \*  
Five College Radio  
University of Massachusetts  
Amherst, MA 01002

WTBS (FM)  
3 Ames St.  
Cambridge, MA 02142

WZBC (FM) \*  
Boston College  
Newton, MA 02158

WMHC (FM) \*  
Mt. Holyoke College  
South Hadley, MA 01075

WBRS (FM) \*  
Brandeis University  
Waltham, MA 02154

## MICHIGAN

WDTR (FM)  
9345 Lawton Ave.  
Detroit, MI 48206

WHPR (FM)  
Instructional Material Center  
20 Bartlett  
Highland Park, MI 48203

WGGL (FM)  
Michigan Tech University  
Houghton, MI 49931

WMUK (FM) \*  
Friedmann Hall  
Western Michigan University  
Kalamazoo, MI 49001

WSHJ (FM)  
24675 Lahser Rd.  
Southfield, MI 48075

WSAE (FM)  
Spring Harbor College  
Spring Harbor, MI 49283

WUNN \*  
Mason, MI 48854

## MINNESOTA

KBSB (FM)  
Bemidji State College  
Bemidji, MN 56601

KEDQ (FM)  
Austin Junior College  
Austin, MN

KBEM (FM)  
1101 Third Avenue, S.  
Minneapolis, MN 55404

KUMM (FM)  
University of Minnesota  
Morris, MN

## MISSISSIPPI

WHJJ (FM) \*  
Mississippi College  
Clinton, MS 39056

## MISSOURI

KBIA (FM)  
409 Jesse Hall  
University of Missouri  
Columbia, MO 65201

KGSP (FM) \*  
Park College  
Parkville, MO 64150

KSLH (FM) \*  
1517 S. Theresa Ave.  
St. Louis, MO 63104

## MONTANA

KMSM (FM) \*  
Montana Tech  
Butte, MT 59701

## NEBRASKA

KGBI (FM)  
1515 S. 10th St.  
Omaha, NB 68108

## NEVADA

KUNR (FM)  
University of Nevada  
Reno, NV 89507

## NEW HAMPSHIRE

WUNH (FM)  
Memorial Union Building  
University of New Hampshire  
Durham, NH 03824

## NEW JERSEY

WCVH (FM)  
Flemington, NJ 08822

WGLS (FM)  
Glassboro State College  
Glassboro, NJ 08028

WHPH (FM)  
63 Mt. Pleasant Ave.  
Hanover, NJ 07936

WJSV (FM)  
50 Early St.  
Morristown, NJ 07960

WBGO (FM) \*  
Central H.S.  
Newark, NJ 07102

WRSU (FM) \*  
126 College Ave.  
Rutgers State University  
New Brunswick, NJ 08901

WSOU (FM)  
Seton Hall University  
South Orange, NJ 07079

WTSR (FM) \*  
Kendall Hall  
Trenton State College  
Trenton, NJ 08625

## NEW MEXICO

KRWG-FM  
Box 3J  
New Mexico State University  
Las Cruces, NM 88003

KEDP (FM) \*  
New Mexico Highlands Uni.  
Las Vegas, NM 87701

## NEW YORK

WDWN (FM) L\*  
Auburn Community College  
Auburn, NY 13021

WCEB (FM) \*  
Corning, NY 14830

WSLU (FM) \*  
St. Lawrence University  
Canton, NY 13617

WSHS (FM) \*  
820 Hempstead Turnpike  
Franklin Square, NY 11010.

WCWP (FM)  
C. W. Post Center  
Greenvale, NY 11548

WHPC (FM) \*  
Box 40006, Rossevelt Field  
Garden City, NY 11530

WRCU (FM)  
Colgate University  
Hamilton, NY 13346

WKCR (FM) \*  
208 Ferris Booth Hall  
Columbia University  
New York, NY 10027

WPOB (FM) \*  
Central School Dist. 4  
Plainview, NY 11803

WIRQ (FM)  
260 Cooper Rd.  
Rochester, NY 14617

## NORTH CAROLINA

WGWG (FM) \*  
Boiling Spring, NC 28017

WUNC (FM)  
Swain Hall  
University of North Carolina  
Chapel Hill, NC 27514

WUAG (FM)  
University of North Carolina  
Greensboro, NC 27412

WSHA (FM) \*  
Shaw University  
Raleigh, NC 27602

WFDD (FM)  
Wake Forest College  
Box 7405, Reynolds Station  
Winston-Salem, NC 27109

## NORTH DAKOTA

KDSU (FM)  
North Dakota State University  
Fargo, ND 58102

KFNW (AM) \*  
Northwestern College  
Fargo, ND 58102

## OHIO

WBGU-FM  
Bowling Green State University  
Bowling Green, OH 43403

WCDR (FM) \*  
Cedarville College  
Cedarville, OH 45314

WCWT (FM)  
192 W. Franklin St.  
Centerville, OH 45459

WNSD (FM) \*  
4850 Poole Rd.  
Cincinnati, OH 45239

WVXU (FM)  
Alter Hall 11  
Xavier University  
Cincinnati, OH 45207

WCRF (FM) \*  
9756 Barr Road  
Cleveland, OH 44141

WOBC (FM) \*  
Wilder Hall  
Oberlin College  
Oberlin, OH 44074

WRCJ (FM)  
810 E. Columbia Ave.  
Reading, OH 45215

WSLN (FM) \*  
Ohio Wesleyan University  
Delaware, OH 43015

WEEC (FM) \*  
2348 Troy Rd.  
Springfield, OH 45504

WOBN (FM) \*  
Otterbein College  
Westerville, OH 43081

#### OKLAHOMA

KCSC (FM) \*  
Central State University  
Edmond, OK 73034

KALU (FM) \*  
Langston University  
Langston, OK 73050

KWGS (FM) \*  
600 S. College  
University of Tulsa  
Tulsa, OK 74104

#### OREGON

KSOR (FM)  
Southern Oregon College  
Ashland, OR 97520

KCHC (FM) 8  
451 N. 2nd St.  
Central Point, OR 97501

KRVM (FM)  
200 N. Monroe St.  
Eugene, OR 97402

#### PENNSYLVANIA

WGEV (FM)  
Geneva College  
Beaver Falls, PA 15010

WJRH (FM) \*  
Lafayette College  
Easton, PA 18042

WTGP (FM)  
Thiel College  
Greenville, PA 16125

WHHS (FM) \*  
Mill Rd. & Leedom Ave.  
Havertown, PA 19083

WFNM (FM)  
College Ave.  
Franklin and Marshall College  
Lancaster, PA 17604

WKPS (FM) \*  
Westminster College  
New Wilmington, PA 16142

WVVE (FM) \*  
Montgomery County Area Tech School  
Norristown, PA 19401

WKDU (FM) \*  
Drexel University  
Philadelphia, PA 19104

WQED-FM  
4802 5th Ave.  
Pittsburgh, PA 15213



WVMW (FM)  
Marywood College  
2300 Adams Ave.  
Scranton, PA 18509

WDFM (FM) \*  
304 Sparks Bldg.  
Pennsylvania State University  
State College, PA 16802

WRKC (FM)  
King's College  
133 N. Franklin St.  
Wilkes-Barre, PA 18711

## RHODE ISLAND

WRIU (FM)  
Memorial Union  
U. of Rhode Island  
Kingston, RI 02881

WDOM (FM) \*  
Providence College  
Box 377, Friar Station  
Providence, RI 02918

WJHD (FM) \*  
Portsmouth Abbey School  
Portsmouth, RI 02871

## SOUTH CAROLINA

WSBF (FM)  
Clemson University  
Clemson, SC 29631

WMPR-FM \*  
South Carolina ETV  
Sumter, SC 29150

## SOUTH DAKOTA

KTEQ (FM)  
Box 881, Surbeck Center  
Rapid City, SD 57701

KESD-FM  
South Dakota State U.  
Brookings, SD 57006

## TENNESSEE

WKCS (FM) \*  
Fulton H.S.  
Knoxville, TN 37917

WQOX (FM)  
2597 Avery Ave.  
Memphis, TN 38112

WNAZ (FM) \*  
Trevecca Nazarene College  
333 Murfreesboro Road  
Nashville, TN 37210

WUTS (FM) \*  
University of the South  
Sewanee, TN 37375

## TEXAS

KGCC (FM) \*  
Grayson County Junior College  
Box 979  
Denison-Sherman, TX 75090

KUHF (FM)  
University of Houston  
3801 Cullen Boulevard  
Houston, TX 77004

KPFT (FM)  
618 Prairie  
Houston, TX 77002

KNCT (FM)  
Central Texas College  
Killeen, TX 76541

KTXT (FM)  
Texas Tech University  
Lubbock, TX 79409

KOCV (FM) \*  
Odessa College  
Odessa, TX 79761

KWLD (FM)  
Wayland Baptist College  
Plainview, TX 79072

## UTAH

KUSU-FM \*  
Utah State University  
Logan, UT 84322

KMTP (FM) \*  
North Sanpete School Dist.  
Mt. Pleasant, UT 84647

KRDC (FM) \*  
Dixie College  
St. George, UT 84770

## VERMONT

WGDR (FM)  
Rt. 14A  
Plainfield, VT 05667

WVUS (FM)  
Windham College  
Putney, VT 05646

## VIRGINIA

WVWR (FM) \*  
Virginia Western Community College  
Roanoke, VA 24002

## WASHINGTON

KUGS (FM) \*  
Bellingham, WA 98225

WGTS (FM)  
Walla Walla College  
College Place, WA 99324

KLVR (FM) \*  
Lower Columbia College  
Longview, WA 98632

KAOS (FM) \*  
Evergreen State College  
Olympia, WA 98507

KRAB (FM) \*  
1406 Harvard Ave.  
Seattle, WA 98122

KPBX (FM)  
24 W. 27th Ave.  
Spokane, WA 99203

## WEST VIRGINIA

WVPB (FM)  
Beckley, WV 25801

WVBC (FM) \*  
Bethany College  
Bethany, WV 26032

WFGH (FM) \*  
Fort Gay High School  
Fort Gay, WV 22514

## WISCONSIN

WRPN (FM)  
Ripon College  
Ripon, WI 54971

WSHS (FM)  
1042 School Avenue  
Sheboygan, WI 53081

## WYOMING

KUWR (FM)  
Box 3661,  
University Station  
Laramie, WY 82070

APPENDIX C

Final Questionnaire and Letter of Transmittal

## COOPERATIVE RADIO TAPE EXCHANGE SURVEY--PHASE II

A Business Reply return address is provided on the outer sheet; after completing the survey, simply fold, seal, and mail; no postage is necessary.

## A. STRUCTURE

1. How many stations participate in your exchange? \_\_\_\_\_
2. What form of agreement was used to organize your exchange?
  - verbal or unwritten agreement to cooperate
  - formal written objectives, constitution, etc.
  - contract
  - other \_\_\_\_\_
3. Along what lines is your exchange organized?  
(mark one or more)
  - university system or other administrative unit
  - regional--contained within part of a state
  - statewide
  - regional--reaching beyond state boundaries
  - stations with similar program philosophies
  - stations with similar staff and funding levels
  - other \_\_\_\_\_
4. How long has your exchange been in operation? \_\_\_\_\_

## B. ADMINISTRATION

How is your exchange administered?

- no central administrator--exchange run by persons at all member stations
- one central administrator
- board of directors
- other \_\_\_\_\_

## C. FUNDING

1. What do member stations contribute to the exchange?
  - in-house costs only--their own production costs and/or duplication costs, plus shipping
  - in-house costs, plus administrative costs or other fees
2. Does your exchange receive funding from sources other than the budgets of member stations?
 

Yes                       No

3. If the answer to 2 was Yes, what sources does your exchange use for outside funding?

- CPB  
 foundation or private grant  
 state agency funding  
 private contributions  
 other \_\_\_\_\_

#### D. PROGRAMMING

1. Do all stations contribute equal amounts of programming to the exchange?

- Yes  
 No

If the answer above is yes, how many hours of programming weekly are exchanged? \_\_\_\_\_

If the answer above is no, can you estimate an average number of hours exchanged weekly? \_\_\_\_\_

2. Would you say the amount of programming and types of programming exchanged

- is formalized, with little variation  
 is flexible, with stations sharing suitable programming whenever it becomes available on an informal basis

3. What types of programming do your member stations exchange?

( mark one or more)

- News  
 Public affairs (in-depth material on public interest issues)  
 Recorded speeches  
 Instructional programs  
 Music, entertainment or information  
 Live music recordings  
 Other entertainment (comedy, etc.)  
 Drama  
 Other \_\_\_\_\_

#### E. OPERATIONS

1. What method of tape routing is used by your exchange ?

- one-to-one--tape copies are sent to each member station and received from each member station  
 round robin--tape copies are circulated from originating station to member station to second member station to third member station, etc., and eventually back to the originator.  
 other \_\_\_\_\_

2. What method of transportation is used to distribute your tapes?

- Postal service--4th class rate  
 Postal service--1st class  
 Private parcel service  
 Other \_\_\_\_\_

3. What type of schedule is used by the members of your exchange?

- Weekly shipping  
 Monthly shipping  
 Quarterly shipping  
 Variable schedule--on demand  
 Other \_\_\_\_\_

4. Do your member stations exchange program material through other means in addition to tape exchange?

- Yes                       No  
 Phone lines  
 Off-air pickup  
 Microwave link  
 Other \_\_\_\_\_

F. INFORMATION & COMMENTS

This survey completed by \_\_\_\_\_ Title: \_\_\_\_\_

Address: \_\_\_\_\_

Name of exchange : \_\_\_\_\_  
( if any)

Comments and criticisms will be appreciated. Use the space below.  
 Also-unless your exchange has a large number of member stations, say  
 15 or more-could you write their call letters and locations here?  
 Thanks for your help-

Peter Nordgren

FIRST CLASS  
Permit No. 129  
Menomonie, WI  
54751

BUSINESS REPLY MAIL

No postage stamp necessary if mailed in the United States  
Postage will be paid by:

Peter Nordgren  
WVSS-FM  
P.O. Box 3247  
Menomonie, WI 54751

Please staple or seal this edge



UNIVERSITY OF WISCONSIN-STOUT  
MENOMONIE, WISCONSIN  
54751

WVSS-FM Radio  
June 16, 1975

In a recent nationwide survey of noncommercial radio stations, you were identified as a person who is involved in the operation of a cooperative radio tape exchange. The exchange named was with the following stations:

I'm making a study of radio tape exchanges in order to determine their place and potential in noncommercial radio today. Enclosed is a survey which is the second phase of this study, and which asks for some in-depth information concerning your particular exchange. I hope you'll be able to help me by completing this survey and returning it to me before July 1. A postage-free Business Reply return has been provided on the outer survey sheet for your convenience.

For the purpose of this study, a cooperative radio tape exchange has been defined as any system by which two or more radio stations share self-produced program material through exchange of audio tapes. If your organization does not fit this definition, please note this on the top of the survey when you return it.

Results of this study will be used in completion of my M.S. degree in Audiovisual Communications; the initial survey has produced such interest that I'm also hoping for publication of the complete study.

Thanks for your time, information, and comments.

Sincerely,

Peter Nordgren  
WVSS-FM Radio  
UW-Stout

Enclosure



APPENDIX D

Mailing List for Final Questionnaire

This list consists of central officers of those non-commercial radio program tape exchanges identified through the initial questionnaire. Where a central officer was not identified, the questionnaire was sent to the program director of the member station which responded to the initial questionnaire. The symbol \*\* indicates a respondent who felt that his exchange did not fit the definition of noncommercial radio program tape exchange as used in this study. The symbol \* indicates a nonrespondent to the questionnaire.

Roger Pritchard, Station Mgr.  
 KPFA (FM)  
 2207 Shattuck Ave.  
 Berkeley, CA 94704

Program Director \*  
 KPOO  
 532 Natoma St.  
 San Francisco, CA 94103

Dr. William G. Mitchell \*\*  
 Director of Educ. Resources  
 University of South Florida  
 Tampa, FL 33620

Carl R. Jenkins  
 KHKE (FM)  
 University of Northern Iowa  
 Cedar Falls, IA 50613

Program Director  
 WKCC (FM)  
 Kentucky Christian College  
 Grayson, KY

Don Martin, President  
 Adventist Radio Network  
 WGTS-FM  
 Takoma Park, MD

Godwin Oyewole, President  
 Eastern Public Radio Network  
 WFCR (FM)  
 Univ. of Massachusetts  
 Amherst, MA 01002

Mary Kovachich, News/Traffic  
 WGGL (FM)  
 Michigan Tech University  
 Houghton, MI 49931

Bill Devine, Treasurer  
 Mo. Public Radio Ass'n. Tape  
 Exchange  
 G-6 Library  
 Rolla, Missouri

Program Director  
 WGLS (FM)  
 Glassboro State College  
 Glassboro, NJ 08028

Program Director \*  
WIRQ (FM)  
260 Cooper Rd.  
Rochester, NY 14617

Minority Affairs Tape  
Exchange Project  
Maurice McCall  
WGUC (FM)  
Cincinnati, OH

Ed Eakins, Program Coord.  
Ohio Educational Broadcasting  
2470 North Star Rd.  
Columbus, OH 43211

Northwest Public Radio Network  
John Ross  
KBOO  
Portland, OR

Mike Marek, President  
South Dakota Public Radio  
Network  
KUSD-AM & FM  
Vermillion, SD

David Bullock \*  
KGTS (FM)  
Walla Walla College  
College Place, WA 99324

Rick Maedler, Station Mgr. \*\*  
KRAB (FM)  
1406 Harvard  
Seattle, WA 98122

James Hashek, Director  
Wisconsin Intercampus Radio Network  
WUEC (FM)  
University of Wisconsin  
Eau Claire, WI 54701

APPENDIX E

Cooperative Program Tape Networks Participating  
in the Study

## Adventist Radio Network

KANG	Angwin, California	WGTS	Takoma Park, Maryland
KEMR	Loma Linda, California	WSMC	Collegedale, Tennessee
KLLU	Riverside, California	KSUC	Keene, Texas
WAUS	Berrien Springs, Michigan	KGTS	College Place, Washington
KUCV	Lincoln, Nebraska	VOAR	St. John's, Newfoundland
WDNX	Savannah, Tennessee		

## Eastern Public Radio Network

WAMU	Washington, DC	WFCR	Amherst, Massachusetts
WMEH	Orono, Maine	WAMC	Albany, New York
WGBH	Boston, Massachusetts	WITF	Hershey, Pennsylvania
WBUR	Boston, Massachusetts	WUHY	Philadelphia, Penna.
WICN	Worcester, Massachusetts	WRFK	Richmond, Virginia

## Missouri Public Radio Association Program Exchange

KBFL	Buffalo	KXCV	Maryville
KBIA	Columbia	KSOZ	Point Lookout
KLUM	Jefferson City	KUMR	Rolla
KCUR	Kansas City	KWMU	St. Louis

## Ohio Public Radio Associates

WAPS	Akron	WOUB	Athens
WBGU	Bowling Green	WRCJ	Reading
WCDR	Cedarville	WAUP	Akron
WCBE	Columbus	WGUC	Cincinnati
WKSU	Kent	WYSU	Youngstown
WCMO	Marietta	WCWT	Centerville
WMUB	Oxford	WCSU	Wilberforce
WRMU	Alliance	WCWS	Wooster
WOSU	Columbus	WSLN	Delaware

## South Dakota Public Radio Tape Exchange

KESD	Brookings	KBHU	Spearfish
KTEQ	Rapid City	KUSD	Vermillion
KAVR	Sioux Falls		

## Northwest Public Radio Network

KTOO	Juneau, Alaska	KAOS	Olympia, Washington
KLCC	Eugene, Oregon	KRAB	Seattle, Washington
KBOO	Portland, Oregon	KPBX	Spokane, Washington

Pacifica Stations Program Exchange

KPFA	Berkeley, California	KPFT	Houston, Texas
KPFK	North Hollywood, CA.	WBAI	New York City

Wisconsin Intercampus Radio Network

WUEC	Eau Claire	WSUP	Platteville
WGBW	Green Bay	WRFW	River Falls
WVSS	Menomonie	WWSP	Stevens Point
WUWM	Milwaukee	WSSU	Superior
WRST	Oshkosh	WSUW	Whitewater

Others

WKCC Grayson, Kentucky  
 WMKY Morehead, Kentucky

KEDQ Austin, Minnesota  
 KMSU Mankato, Minnesota

WOI Ames, Iowa  
 WSUI Iowa City, Iowa  
 KHKE/KUNI Cedar Falls, Iowa

KPFA Berkeley, California  
 KPOO San Francisco, California  
 KBBF Santa Rosa, California

WIRQ Rochester, New York  
 WGMC Greece, New York  
 WRHR Henrietta, New York