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ABSTRACT

Aspects of educational radio covered in this bulletin include a brief history, federal rules and regulations pertaining to it, application procedures, networks and sources of programing, sources of funding, and organizations and government agencies with an interest in educational radio. (JK)

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# Educational Radio

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GENERAL

Educational institutions were among the pioneers in the development of radio broadcasting. WHA, licensed to the University of Wisconsin in Madison, began experimental operation in 1919 as station 9XM. Its present call letters were assigned on January 13, 1922. By 1925, there were 171 educational organizations with stations on the air, but for various reasons most of these stations eventually ceased operation. FM broadcasting was authorized in 1941, and the number of educational stations on the air grew rapidly following the end of World War II. At the beginning of 1972, more than 500 educational radio stations were licensed, about 40 percent of them having gone on the air in the previous five years.

In its long history--from the beginning of broadcasting--educational radio has served the public with cultural, educational and entertainment programs, and has supplied students and teachers on all levels with instructional materials designed for classroom use. In recent years, the planning and development of state, regional and national networks have marked educational radio's further growth.

In addition to educational radio broadcast stations, which are licensed to a diversity of "nonprofit educational organizations . . . for the advancement of an educational program," about 500 carrier-current or wired-wireless campus systems are operated by educational institutions. These are closed-circuit feeds to campus buildings and, unlike noncommercial educational radio stations, they have no restrictions on advertising. The FCC does not license campus systems. Its regulations apply to these stations principally in respect to radiation which might affect other radio services.

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INFORMATION BULLETIN

009 994

## Educational Radio - 2

On April 9, 1971, the FCC issued a Notice of Inquiry concerning carrier-current radio systems. This bulletin, however, is devoted to licensed educational FM and AM broadcast stations.

### HISTORY

The Radio Act of 1912 provided the first domestic law for control of radio in general, and made the Secretary of Commerce responsible for licensing radio stations and operators. The 1912 Act, however, did not give the Secretary authority to limit broadcast time and power. As the number of stations grew over the years, many broadcasters began to operate at will, jumping frequencies and power and creating bedlam on the air. Early broadcasting was experimental. Limited commercial stations were authorized in 1919; in 1922, the wavelength of 360 meters--about 830 kilohertz--was assigned for the transmission of "important news items, entertainment, lectures, sermons, and similar material." From 1922 through 1925, four successive National Radio Conferences made recommendations for changes in frequencies, power and time limitations.

The Radio Act of 1927 created a five-member Federal Radio Commission (FRC) with certain regulatory powers over broadcasting, including licensing and call letter assignment. Much of the early work of the FRC was devoted to straightening out confusion on the air, and new regulations resulted in about one-fifth of the then operating stations surrendering their licenses.

In 1929, the Secretary of the Interior appointed an Advisory Committee on Education by Radio, comprised of representatives of education, broadcasting and related fields, to study the uses of radio in the classroom and in adult education, and the development of educational radio in general. Many of the recommendations of this Committee were considered by the FCC in its later determinations concerning noncommercial radio broadcasting.

This was the atmosphere in which early educational radio grew, flourished and then virtually disappeared. In 1925, almost one-third (171) of the 571 radio stations on the air were operated by educational institutions.

With the growing number of commercial stations providing many of the services previously offered by educational broadcasting, the vast majority of educational stations went off the air in subsequent years. Altogether, some 202 stations operated by educational institutions went on the air from 1921 through 1936; by 1937, only 38 remained. Twenty-five stations were still operating on AM channels at the beginning of 1972.

The rapid growth of broadcasting and the competition for the limited spectrum space raised questions as to whether a minimum percentage of broadcast time should be devoted to educational purposes, and whether certain frequencies should be reserved for use by educational groups. When Congress was considering the Communications Act (1934), it was urged by many groups to include a requirement that stations set aside substantial portions of their broadcast time for use by educational and religious institutions and other non-profit organizations. The Wagner-Hatfield amendment proposed to allocate 25 percent of all radio broadcasting frequencies to such groups. The amendment did not pass, but Congress included a section (307(c)) in the Act which directed the newly-created Federal Communications Commission to make a study of the proposal ". . . that Congress by statute allocate fixed percentages of radio broadcasting facilities to particular types or kinds of nonprofit radio programs or to persons identified with particular types or kinds of nonprofit activities, and shall report to Congress, not later than February 1, 1935, its recommendations together with the reasons for the same."

In hearings on this proposal, commercial broadcasters strongly stated that there was no need for special allocations, and promised to provide for the needs of education. In its report to Congress, the FCC concluded that "there is no need for a change in the existing law" inasmuch as "the interests of the nonprofit organizations would be better served by giving educators access to costly and efficient equipment and access to an established audience."

Accordingly, the FCC held a national conference in May 1935, to explore plans for cooperation between broadcasters and nonprofit organizations; from this conference the FCC created the Federal Radio Education Committee (FREC). In 1936 the FREC urged "that a portion of the ultra high frequencies be reserved for noncommercial use by organized educational agencies."

In 1938, the FCC set aside certain AM channels between 41 and 42 megahertz (MHz) for what were then called "curricular" stations--channels to be used exclusively by educational institutions. In 1941, FM broadcasting was authorized, and the FCC allocated five channels between 42 and 43 MHz for noncommercial FM use to replace the AM facilities. In 1945, as part of an extensive revision of frequency allocations, the FCC reserved 20 FM channels between 88 and 92 MHz for noncommercial educational stations.

In 1948, the FCC authorized lower power (10-watt) operation on educational FM channels, enabling an educational group to begin broadcasting over a limited--two-to five-mile--radius for a capital investment of only a few thousand dollars. Higher-power equipment could easily be added at a future date. In 1951, to aid further the development of FM educational radio, the FCC authorized remote control of low power educational stations. No minimum effective radiated power (ERP) or antenna height is specified for noncommercial FM educational stations, nor are these stations required to operate a minimum number of hours. In November 1966, the FCC issued a Notice of Inquiry which concerned the over-all revision of FM broadcast station rules and technical standards. Comments received included strong support for the continuation of 10-watt stations, the need to upgrade the programming of many stations, the need to solve the Channel 6 interference problem and support for an allocations table that might find more frequencies for educational licensees in saturated metropolitan areas. By January 1972, an allocation plan was not yet developed, partly because of the need to complete border frequency agreements between the United States and Canada and Mexico.

Educational radio's role was recognized with the passage of the Public Broadcasting Act of 1967, which included educational radio program development as a function of the newly-established Corporation for Public Broadcasting. For the first time, educational radio was recognized as an eligible applicant for matching facilities grants from the U. S. Office of Education.

Although the Commission has no reserved AM channels, in January 1972, 28 educational institutions and groups were operating educational stations on AM frequencies. These stations are subject to the rules governing standard broadcast operation, including minimum hours of operation, power and technical standards. There are very few AM frequencies available, especially in the northeast and other highly populated areas of the country. In addition, 17 educational stations were operating on nonreserved FM channels in January 1972.

The growth of FM educational broadcasting is illustrated in the following table listing the total number of educational FM stations on the air at the end of each calendar year:

1938 - 1	1950 - 73	1960 - 175
1939 - 2	1951 - 85	1961 - 194
1940 - 4	1952 - 98	1962 - 209
1941 - 7	1953 - 112	1963 - 237
1942 - 8	1954 - 122	1964 - 255
1943 - 8	1955 - 123	1965 - 268
1944 - 8	1956 - 125	1966 - 296
1945 - 9	1957 - 141	1967 - 326
1946 - 10	1958 - 151	1968 - 362
1947 - 15	1959 - 162	1969 - 396
1948 - 27		1970 - 455
1949 - 48		1971 - 494

About 72 percent of the FM educational stations are licensed to colleges and universities, about 17 percent to local boards of education and schools, 6 percent to churches or religious organizations, and the remainder to community corporations, libraries and other organizations. About 45 percent of all educational FM stations are 10-watters.

Educational radio stations provide instructional materials to teachers and students, and cultural, informational, public affairs and entertainment programs to the general public. Generally, the purpose of educational radio stations is to provide the public and schools with quality service which does not duplicate commercial radio services. Special programming innovations in educational radio include establishment of two-way medical and nursing conferences by the Albany (New York) Medical College through its FM station, WAMC. In 1971, 72 hospitals participated in WAMC's program, and similar systems were in operation in other states, including North Carolina, Wisconsin, Ohio, Utah and Pennsylvania.

**RULES AND REGULATIONS**

A special section of the Federal Communications Commission's broadcast rules and regulations applies to educational radio--"Subpart C - Noncommercial Educational FM Broadcast Stations." This subpart includes, among other things, classifications and allocation of frequencies. Channel assignments and licensing requirements are covered in Sections 73.501-73.503, which state:

**73.501 Channels available for assignment**

(a) The following frequencies, except as provided in paragraph (b) of this section are available for non-commercial educational FM broadcasting:

Frequency (MHz):	Channel No.	Frequency (MHz):	Channel No.
88.1-----	201	90.1-----	211
88.3-----	202	90.3-----	212
88.5-----	203	90.5-----	213
88.7-----	204	90.7-----	214
88.9-----	205	90.9-----	215
89.1-----	206	91.1-----	216
89.3-----	207	91.3-----	217
89.5-----	208	91.5-----	218
89.7-----	209	91.7-----	219
89.9-----	210	91.9-----	220

(b) In Alaska, the frequency band 88-100 MHz is allocated exclusively to Government radio services and the non-Government fixed service. The frequencies

88.1 MHz through 91.9 MHz (Channels 201 through 220, inclusive) will not be assigned in Alaska for use by noncommercial educational FM broadcast stations; however, the frequencies 100.1-107.9 MHz (Channels 261 through 300, inclusive) are available for such use.

73.502 State-wide plans

In considering the assignment of a channel for a noncommercial educational FM broadcast station, the Commission will take into consideration the extent to which each application meets the requirements of any state-wide plan for noncommercial educational FM broadcast stations filed with the Commission, provided that such plans afford fair treatment to public and private educational institutions, urban and rural, at the primary, secondary, higher, and adult educational levels, and appear otherwise fair and equitable. Relationships of state plans to the frequency requirements of neighboring states are also considered.

73.503 Licensing requirements and service

(a) A noncommercial educational FM broadcast station will be licensed only to a nonprofit educational organization and upon showing that the station will be used for the advancement of an educational program.

(1) In determining the eligibility of publicly supported educational organizations, the accreditation of their respective state departments of education shall be taken into consideration.

(2) In determining the eligibility of privately controlled educational organizations, the accreditation of state departments of education and/or recognized regional and national educational accrediting organizations shall be taken into consideration.



(b) Each station may transmit programs directed to specific schools in a system or systems for use in connection with the regular courses as well as routine and administrative material pertaining thereto and may transmit educational, cultural, and entertainment programs to the public.

(c) Each station shall furnish a nonprofit and noncommercial broadcast service. No sponsored or commercial programs shall be transmitted nor shall commercial announcements of any character be made. A station shall not transmit the programs of other classes of broadcast stations unless all commercial announcements and commercial references in the continuity are eliminated. The provisions of this paragraph shall not be considered to prohibit the broadcast of programs (without commercial announcements or references) where the only consideration received by the licensee is the furnishing of the program material and/or the payment of line charges.

Additional rules, including administrative procedure, equipment, technical operation, operators and other operating requirements are set out in subsequent paragraphs, through Section 73.597.

AUXILIARY  
AND SPECIAL  
BROADCAST  
SERVICES

Many educational radio stations operate microwave systems, which use narrow, concentrated beams for efficient short-range transmission, to provide program circuits between the studio and transmitter (aural Studio Transmitter Link (STL) and to relay signals between radio broadcast stations (aural Intercity Relay)). These operations are covered in Part 74, Subpart E, "Aural Broadcast STL and Intercity Relay Stations," of the broadcast rules.

Many educational radio stations use remote pickup (aural) for the transmission of program material and related communications from a point away from the studio, and for communicating with other remote pickup broadcast base and mobile stations. The applicable FCC rules are found in Part 74, Subpart D, "Remote Pickup Broadcast Stations."

Some educational radio stations provide multiplex services under a Subsidiary Communications Authorization (SCA), transmitting programs of a broadcast nature, but of interest primarily to limited segments of the public. Such subcarrier programming includes postgraduate and vocational instruction, limited-interest entertainment programs and educational-informational materials to select audiences. Sections 73.294, 73.319 of the rules cover SCA operations.

In 1961, the FCC adopted standards permitting FM stations to transmit stereophonic programs on a multiplex basis without specific FCC authorization. A number of educational radio stations provide such "stereo" broadcasts, involving dual transmission and reception. Rules governing stereophonic FM service are contained in Part 73, Subpart C, "FM Stations," in Sections 73.297 and 73.322.

In November 1970, the Commission issued a Notice of Proposed Rule Making in Docket 19079 to permit educational FM stations to charge fees for multiplexing educational courses and to use multiplexing for a wider variety of educational transmissions.

Effective November 30, 1970, Sections 73.503 and 73.621 of the rules were amended to permit hourly identification of sources and funds for programs longer than an hour in duration. On programs of an hour or less, program sources and funds may be announced at the beginning and the close. Where identification by name only is inadequate, the rules permit further identification of a company division or subsidiary, if that entity is the actual donor and if it is a bona fide operating division. Where several parties have made substantial contributions to general station operating expense, a general announcement of all contributors at the opening and close of the day and the listing of one individual contributor each hour is permitted.

The FCC has reserved all of the channels in the 88-92 MHz band for noncommercial FM educational stations. Inasmuch as there is no table of assignments for these reserved channels, the prospective applicant must first conduct an engineering survey to find a suitable channel which is available.

APPLICATION  
PROCEDURES

For this purpose, it is necessary for the applicant to establish that the proposed operation would not cause or receive interference within the pertinent 1 mv/m contours (see Note to Section 1.573 of the Commission's rules). In addition, applications proposing use of Channels 218, 219 or 220 must meet the applicable mileage separation requirements with Channels 221, 222 and 223 specified in Sections 73.207 and 73.504 of the Commission's rules.

An application may be submitted for a Construction Permit (CP) to activate a channel. The major metropolitan areas in the country are virtually saturated, and there is little or no possibility of assigning additional channels with the possible exception of very low power operations.

Expeditious processing of a construction permit application is dependent upon the good order of the application, and the completeness and preciseness of information it contains. Many educational applicants obtain qualified legal and engineering counsel before preparing an application. Applicants for new broadcast stations or for license renewals or major changes in existing facilities must give local notice of their filing through a local station (if any) and/or through a local newspaper, as specified in Section 1.580 of the rules.

All applications must be submitted in triplicate to The Secretary, Federal Communications Commission, Washington, D. C. 20554.

Before applications are accepted for filing and assigned a file number, engineers check possible interference within the primary coverage area (1 mv/m contour) of any co-channel or adjacent channel station, and possible interference received within the proposed station's primary coverage area. Such interference is a principal fault in returned educational FM applications. An application may not be acted upon until at least 30 days following acceptance, during which time it is subject to objecting petitions. Processing of applications involves three major areas of examination and review--engineering, financial and legal.

The engineering examination checks whether the coordinates are accurate and verifies calculations to determine whether they conform to the technical requirements of the rules. The Antenna Survey Branch determines whether the proposed antenna structure meets Federal Aviation Administration regulations. The low antenna heights used by a majority of educational FM stations do not require FAA approval. In a number of cities, TV Channel 6 (82-88 MHz) prevents full use of the educational FM band and sometimes requires prospective applicants to consider seeking channels in other parts of the band.

An accountant checks the financial qualifications, including adequacy of resources and matters such as discrepancies between estimated and potential actual operating costs, and total costs balanced against particular costs. The financial examination is particularly concerned with verification of the source of funds; whether the applicant has available or committed the funds necessary to construct and operate the station for one year, or has been given the authority to use the money, bonds, securities or other finances described in the application.

Attorneys determine whether the applicant is qualified under the Communications Act to become a licensee. They check the corporate structure, determine if there are any matters before the Commission which might affect the applicant, and analyze the Statement of Program Service.

When an application for a new station or for changes in an existing facility is approved, a Construction Permit (CP) is issued. The permittee has 60 days in which to begin construction, and a period of twelve months thereafter for completion of the project. If the station cannot be constructed in the specified time, an extension may be applied for. Following issuance of a CP, the permittee may request call letters, with the first available preference assigned. Within 30 days from the time the CP is issued, the permittee must submit an Ownership Report. This report also must be filed with each application for a license renewal, and within 30 days of change of officers or ownership of the station.

When construction of the facility is complete in accordance with the CP, the permittee may conduct equipment tests, following notification to the Commission. Application for the license may be submitted, accompanied by measurements of equipment performance. At the same time--but at least ten days before regular programming is scheduled to begin--Program Test Authority (PTA) may be requested. PTA is contingent upon construction of the station as outlined in the construction permit and approval by the FCC of performance data as detailed in the license application. In effect, PTA entitles the permittee to begin regular station operation and programming, although the license itself is not granted until the license application receives final approval. Renewal dates vary by geographical region; a new licensee must file his first renewal application at the first required date; thereafter, licenses are normally valid for three-year periods.

Educational radio applications, requests and reports are submitted on the following forms:

- FCC Form 340: Application for Authority to Construct or Make Changes in a Noncommercial Educational TV, FM, or Standard Broadcast Station.
- FCC Form 341: Application for Noncommercial Educational TV, FM, or Standard Broadcast Station License.
- FCC Form 342: Application for Renewal of Noncommercial Educational TV, FM, or Standard Broadcast Station License.
- FCC Form 313: Application for Authorization in the Auxiliary Radio Broadcast Services.
- FCC Form 318: Request for Subsidiary Communications Authorization.
- FCC Form 701: Application for Additional Time to Construct Radio Station.
- FCC Form 321: Application for Construction Permit to Replace Expired Permit.
- FCC Form 323E: Ownership Report for Noncommercial Educational TV, FM or Standard Broadcast Station.

NETWORKS AND  
SOURCES

In early 1972 National Public Radio (NPR) was operating what was the first national, non-commercial radio network with live interconnection, with 118 stations in 36 states, the District of Columbia and Puerto Rico. The network is free to qualified NPR member stations as part of their membership fees. In 1971 the NAEB's National Educational Radio Network tape library and distribution functions were transferred to NPR. The NPR tape library provides from 100 to 260 hours of series programming for 9- to 12-month operations, with additional individual programs available. This service is available to all educational radio stations at nominal fees.

The Eastern Public Radio Network, Inc. (EPRN) was preceded by the Educational Radio Network (ERN), formed in 1958 and affiliated with the National Educational Television and Radio Center in the early 1960s. During this period live interconnection was maintained between Washington, D. C., and Boston, Mass. The ERN was renamed the Eastern Educational Radio Network in 1964, and adopted its present name in 1969. It operates as a cooperative tape-exchange network, with live interconnection arranged for special programs such as U. S. Senate hearings and conferences of regional or national importance. The network consists of eight stations located between Boston, Mass., and Richmond, Va.

The North American Broadcasting Corporation provides live-interconnection of member stations with programming in such areas as international news, classical music, and folk music. NABC began operations in 1964 and has established regional centers in several cities which assist in the distribution and production of programs.

The Broadcasting Foundation of America gathers international educational programs from all over the world. The programs are available to educational stations on tape for a nominal fee which is refunded when the tape is returned.

The only State agency to operate an educational radio network is the Wisconsin State Radio Council. The Council was established in 1945 in response to an FCC invitation to State educational authorities to develop plans for the use of broadcasting in education. Eleven stations virtually cover the entire State, using intercity relay and microwave hops. The Wisconsin School of the Air, which began in 1930, presents about eight hours per week of instructional material provided by the Council stations to almost 770,000 students. Other States--including Michigan, Oregon, Kentucky and Minnesota--have educational networks, live and taped, which have various degrees of coverage and kinds of programming.

Various other sources exist to provide in-school radio broadcast service. In some areas, public schools and/or school systems operate stations to broadcast instruction to their own students, as well as to other educational stations which rebroadcast these offerings. In many States, educational stations provide materials to commercial stations. Essentially, the in-school service is a reciprocal endeavor, as many stations share programming with each other. For example, the larger Board of Education stations, like New York's WNYE, which finance their own production of radio instructional materials, make their programs available to stations which do not have similar resources. In Indiana, 15 to 20 in-school stations use Purdue University's "School of the Air."

Educational radio stations obtain program materials from many sources, some programs free, some at low or moderate fees. Such sources include religious organizations, broadcasting offices of other countries (including the British Broadcasting Corporation, Radio Telecommunications Francais, Radio Nederland, Radio Sweden and similar organizations in Australia, West Germany and Italy, among others), the United Nations Educational, Social and Cultural Organization (UNESCO), and national distributing groups. Some foreign services provide live international broadcasts for distribution. The first live international educational networking involving the United States occurred in 1965, when the West German election coverage was broadcast to an NER network of more than 70 educational stations in this country. In 1969, in a similar arrangement, more than 90 stations carried the German election.

Many departments of the United States Government, including Agriculture, Commerce, Defense, Health, Education and Welfare, Housing and Urban Development, Interior, Labor, State, Treasury, and other agencies such as the Atomic Energy Commission, the National Science Foundation, and National Aeronautics and Space Administration, make program materials available to educational stations at no charge.

Different types of ownership reflect different sources of funds. Stations licensed to colleges and universities usually receive the major part or all of their funds from appropriations within the college or university budgets or, in many instances, within the budget of the academic or service department responsible for operating the station. In other cases, support comes from student fees, either in part or wholly if the station is operated as a student-controlled activity. Stations licensed to school systems usually receive direct budgeted support, as do stations operated by other institutional entities such as religious schools. Stations licensed to non-institutional educational organizations frequently depend upon gifts, grants and income from services for their support. Some stations depend on their listeners' voluntary contributions. A station licensed as a noncommercial educational broadcast station is not permitted to carry commercials.

#### FINANCING

In 1970 about 90 percent of educational radio's budget came from Federal, State and local government sources, and the remainder from subscribers, foundations, the Public Broadcasting Corporation, student associations and others. Operating costs accounted for 85 percent of the expenditures, with the rest going for capital expenses.

Many foundations have provided support for educational radio, including the W. K. Kellogg Foundation, the Ford Foundation, the National Home Library Foundation, and the Johnson Foundation, among others.



An important source of funding for educational or public broadcasting, including radio, is the Corporation for Public Broadcasting (CPB), established by Congress in 1967. Although, as of January 1972, the method of permanent financing had not yet been determined, public and private funds enable the CPB to provide funds for program production, fellowships, operating costs, development and networking. Under criteria set up by the CPB--including minimum power, number of paid employees, and available facilities--122 educational radio stations were deemed eligible for assistance by the end of 1971.

The Public Broadcasting Act of 1967 also included radio for the first time in the matching grants facilities program of the U. S. Office of Education. Allocating 10 percent of its funding budget for radio, this program provides up to 75 percent of the cost of facilities for new or expanding educational radio stations.

#### ORGANIZATIONS

Corporation for Public Broadcasting, 888 Sixteenth Street, N. W., Washington, D. C. 20006, and 1345 Avenue of the Americas, New York, N. Y. 10019, was created under Title II of the Public Broadcasting Act in 1967 to promote the growth and development of public broadcast programming on educational radio and television stations. It receives money from both Federal and private sources for the purpose of aiding individual station operations, funding special broadcast projects and helping to train educational broadcasting personnel.

National Public Radio, 888 Sixteenth Street, N. W., Washington, D. C. 20006, was incorporated in March 1970 for the purpose of becoming a primary national non-commercial radio program service. Included are live interconnection and tape distribution, with member stations serving as sources for programming input as well as program disseminators. The priorities of NPR program development are to provide quality programming through extended coverage of public events and the acquisition and production of cultural programs; to establish a system of cooperative program development with member public radio stations; to develop and distribute programs to specified interest groups; and to establish foreign program exchange.

National Educational Radio, a division of the National Association of Educational Broadcasters (NAEB), 1346 Connecticut Avenue, N. W., Washington, D. C. 20036, includes in its membership radio stations, educational institutions, organizations and State agencies. The NAEB provides consultation, conducts research, distributes information, and publishes materials which aid in the development of educational radio and television. Other operational units include: Educational Television Stations Division, Instructional/Professional Services Division, the Office of Research and Development, Personnel Service, and Office of Minority Affairs.

The Joint Council on Educational Telecommunications (JCET), 1126 Sixteenth Street, N. W., Washington, D. C. 20006, is comprised of national and regional educational and communications organizations. The JCET acts as a channel of communication between educational interests, broadcasting, and Federal offices and Congress on national issues affecting educational radio and television. It is concerned with cooperative efforts that can be facilitated by any form of electronic interconnection.

The Association for Educational Communications and Technology (AECT) of the National Education Association, 1201 Sixteenth Street, N. W., Washington, D. C. 20036, holds conferences, conducts research projects, publishes reports and provides consultation on educational media, including radio, for its member schools and teachers.

The Educational Media Council (EMC), 1346 Connecticut Avenue, N. W., Washington, D. C. 20036, is composed of representatives of national educational and business organizations. This group conducts research and develops project plans for effective use of specialized interests and skills in educational communication at all levels.

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The Intercollegiate Broadcasting System (IBS), Box 269, Wesleyan Station, Middletown, Conn. 06457, principally provides services to non-licensed carrier-current, wired-wireless campus stations. With some 250 participants, the IBS helps new campus stations get started, offers program services (used by a number of broadcast stations as well), and represents its members to national advertisers, government agencies and the general public.

Other groups on the national level, such as the Association for Professional Broadcasting Education (APBE), are involved in educational radio activities. Many local, State and regional groups, such as the Western Educational Society of Telecommunications, which conducts programs for and provides assistance to educational and commercial broadcasters in seven western States, the Southern Education Communications Association, and the Rocky Mountain Corporation for Public Broadcasting are active in educational broadcasting matters.

### GOVERNMENT AGENCIES

The Educational Broadcasting Branch, Federal Communications Commission, Washington, D. C. 20554, studies educational broadcasting services, develops policy recommendations on educational communications matters; serves as liaison between the FCC and other public and private groups, including educational stations, institutions, organizations and individuals, other government agencies and industry; provides consultation and coordination on educational communications to various Commission offices; and serves as a clearinghouse of information. With the increasing growth and importance of educational communications, the FCC, in 1970, designated an Educational Communications Committee through which to facilitate policy development and action on educational communications matters.

The Office of Educational Broadcasting Facilities Grants in the National Center for Educational Technology of the U. S. Office of Education, 7th and D Streets, S. W., Washington, D. C. 20202, provides matching grants for radio station facilities (see Financing, page 16). Forms and guidelines for applying for such grants may be obtained directly from that Office. Available funds are dependent on yearly appropriations by Congress. Other offices in the Bureau of Libraries provide training, research, planning and other services relating to educational broadcasting and instructional technologies.

The Office of Education, Department of Health, Education and Welfare, 400 Maryland Avenue, S. W., Washington, D. C. 20201, provides grants for educational media through several other bureaus in addition to the Bureau of Libraries and Educational Technology. Its Bureau of Research includes such programs as Title IV, the Cooperative Research Act, of the Elementary and Secondary Education Act; Title III, Strengthening Instruction in Science, Mathematics, Modern Foreign Languages, and other critical subjects; and Title VII, New Educational Media of the National Defense Education Act. Its Bureau of Elementary and Secondary Education administers, among other programs, Title III, Supplementary Educational Centers and Services, under the Elementary and Secondary Act. Its Bureau of Higher Education administers grants under programs as Title VI, Financial Assistance for the Construction of Undergraduate Facilities; Title I, Grants for Construction of Undergraduate Academic Facilities, and Title II, Grants for Construction of Graduate Academic Facilities, all under the Higher Education Act.

The Appalachian Regional Commission, 1666 Connecticut Avenue, N. W., Washington, D. C. 20235, administers the Appalachian Regional Development Act of 1965. Under this Act--The Appalachian Regional Communications System: A Plan to Open Appalachia to Educational Development--it proposes to use both educational radio and television in its program.

The General Services Administration, 18th and F Streets, N. W., Washington, D. C. 20405, administers the Federal Property Act, which authorizes donations of surplus property, equipment and land. These may be applied for by certain nonprofit educational institutions and organizations such as educational radio and television stations.

The National Foundation on the Arts and the Humanities, 1800 G Street, N. W., Washington, D. C. 20006, is composed of (1) The National Council on the Arts, which administers grants for projects relating to the presentation, performance, execution and the enhancement of public understanding of major art forms, including radio, television, motion pictures, and tape and sound recordings; and (2) The

National Council on the Humanities, which is the policy-making body for the Endowment for the Humanities. It develops and encourages the humanities, including radio and television through research and grants.

The Office of Communications of the Office of Economic Opportunity, 1200 Nineteenth Street, N. W., Washington, D. C. 20506, supports broadcasting projects designed to provide training as well as educational and cultural resources to disadvantaged urban and rural groups.

The Federal Interagency Media Committee (FIMC), consisting of representatives from about 30 Federal agencies, was established in 1965 for greater efficiency and increased service to the public through cooperative information exchange and project efforts. Included in the activities of participating agencies is the provision of program materials and grants and contracts to educational radio. This organization may be contacted through the Educational Broadcasting Branch of the FCC. An organization set up as a result of the efforts of the FIMC is the National Audiovisual Center (NAC), National Archives, 8th and Pennsylvania Avenue, N. W., Washington, D. C. 20408. The NAC serves as a central bibliographic source and as a point of distribution for program materials available from a number of Federal agencies.

Many other Federal agencies offer grants, program material and production contracts to educational radio stations. Among the most active are the Radio and Television Office of the National Aeronautics and Space Administration; Office of Public Information, Department of Commerce; Special Projects Program, National Science Foundation; Audiovisual Officer, Weather Bureau; Manpower Administration, Department of Labor; and the Radio-TV Section, Department of Agriculture. Other Federal agencies with offices active in radio and television are listed under "Networks and Sources" in this bulletin.