opportunities for meteorologists in public broadcasting¹

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On 7 November 1967 President Johnson signed into law the Public Broadcasting Act of 1967. This represents the culmination of extended efforts by many people who have been concerned for the future development of educational television in this country.

ETV began with considerable fanfare in 1952, when the Federal Communications Commission reserved 242 television assignments. Since then ETV has made steady (if slow) progress; providing in-school television services to schools in hundreds of communities and offering a diet of culture and information during the evening hours to the general audience. Too much of the straight educational material has been the "talking face." Too many of the public affairs programs have been panel discussions—more "talking faces." The problem, of course, has been money—or rather the lack of it.

ETV stations have been existing in a sort of limbo—serving two masters; schools during the day and the general audience at night. Funds for services to schools have been available as they are for any adopted educational technique in our public school system. In fact the schools have been generous in their support of in-school television services, paying a bit more than their full share of the cost of running a cooperating ETV station. This little bit more has enabled many television stations to carry on during the evenings, bringing to their audiences the programs offered to them—free of charge—by National Educational Television. And where do the dollars come from for NET? Why, from Ford Foundation, of course. This huge foundation has pumped more than \$100 million into educational television to date. It is safe to say that there would be no ETV had it not been for the Ford Foundation and its subsidiary funds; one for Adult Education and the other for the Advancement of Education. But ETV has been a serious drain even on the Ford Foundation and it is quite understandable that they would anticipate the time when ETV might find a more permanent financial base. Ford's alternate would be to put even much more into ETV but this would compromise their activities in other fields. Furthermore, it is probably philosophically wrong to permit the concentration of support of such an instru-

mentality as educational television principally in any one single financial source. Yet interesting other foundations is difficult because their contributions would be negligible alongside those of Ford and even foundations like to have their light shine brightly in projects where they can play a major role.

Students of ETV finance have long known that the medium could never mature until a far stronger financial base was developed. Each of the three great commercial television networks spends more than \$300 million per year for their programming and supporting operations. In 1965–66 all of ETV spent less than \$100 million whereas the advertiser spent more than \$4 billion on radio and television broadcasting; including programming costs, making of commercials, and broadcast time. It hasn't been a fair ball game. No wonder we've had so much of the "talking face," singly or ensemble.

In late 1964, spearheaded by C. Scott Fletcher, former president of the Fund for Adult Education which provided most of the initial support to ETV stations, the National Association of Educational Broadcasters secured funds to bring ETV stations managers and certain of their board members together to study the future funding of ETV broadcasting. The result of this meeting was the setting up late in 1966, and with the collaboration of President Johnson, of the Carnegie Commission on Educational Television, backed by the Carnegie Corporation of New York with \$250,000.

For almost a year, this distinguished Commission headed by James J. Killian, President of the Corporation of the Massachusetts Institute of Technology, studied the problems of ETV finance, deciding to concentrate just on the cultural and informational aspects of the ETV service. In January 1967 the Commission reported. The complete record of their analysis and recommendations is incorporated in a book with the title, "Public Television, A Program for Action" which costs \$1 and is published by Bantam. It is a definitive document and arrives at the inevitable conclusion that if ETV ever is to flourish its needs will transcend the capabilities of even the most generous private giving, and that government funds must be provided to create a truly viable system.

President Johnson warmly welcomed the report and

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an administration bill was forthcoming within weeks which was guided through the Senate under the able leadership of Senator Pastore of Rhode Island. What surprised most of us who work in these vineyards was the general lack of opposition to what some called a BBC type service, which would normally have been the kiss of death in American broadcasting circles. Perhaps it has become apparent to all that the commercial system of broadcasting has inherent limitations, some of which could be mediated partially by a non-commercial system. For example, any national network program in prime evening time which is unable to earn an approximate Nielsen rating of 20.0 is doomed. This is the same as saying that any program which can't attract 10 million television homes or nearly 40,000,000 viewers is a loser. Advertisers must have huge audiences to justify the high costs of broadcasting. But certainly there are literally hundreds of programs which miss this magic success formula but which would appeal, say, to 20,000,000 people or even 10,000,000 or even less than that. Maybe ETV could fill in this gap in our broadcasting system and at the same time get some of the critics off-the-back of the commercial system. For whatever reasons, approval was almost unanimous. The Senate passed the bill with only one dissenting vote. The principal modification to the bill as proposed by the administration was the inclusion of educational radio which had played no part at all in the studies of the Carnegie Commission. And so the bill's name was changed to the Public Broadcasting Act of 1967.

The going was much rougher in the House of Representatives. Congressmen are closer to their constituents and are elected more often.

Central to the proposed act was a new corporation to receive money—private and public—and dole it out in grants and contracts to needy educational broadcasting enterprises. The Carnegie Commission called this corporation essential to their plan. Here would be the leadership of the movement and the huge financial resources. A goodly number of House members tried to kill this part of the bill, preferring that funds flow directly to the stations which could, in their own way, generate any type of centralized corporation they wished. To those who know how independent ETV managers are, this would have been a fatal flaw. My guess is that the stations never could have agreed on any such thing. They would probably have been discussing definitions for ten years before any constructive thought could have emerged. Anyway, the administration supporters were able to beat off this fundamental challenge and the House passed the bill. They made a few changes which had to be reconciled with the Senate version but this proved to be no obstacle and on 27 October the bill was passed by the current Congress and sent to President Johnson who signed it on 7 November.

I have been long in tracing the history of this legislation because hopefully it may mean much to you; provide many more opportunities for your talents than are now provided by the short weather shows on most com-

mercial stations. Many of these are more like Christmas trees on which to hang commercial baubles. What then are some of the provisions of the Public Broadcasting Act of 1967?

There are three major Titles or sections. Title I extends a program which has been in force since 1962 under the terms of which the Federal government supplied matching funds to help local educational television stations get started. A usual formula was 25% local; 25% State funds; and 50% Federal funds. Most of the funds went for equipment. The new Act extends this program for three years, adds radio and authorizes up to \$10.5 million for fiscal 1968; \$12.0 million for fiscal 1969; and \$15 million for fiscal 1970. Furthermore the Federal government is authorized to contribute up to 75% of the cost of acceptable projects, with the limitation that during any one fiscal year the total grants to any one state shall not exceed 8-1/2% of the total appropriation made by the Congress under this Title. You can ask for money to plan projects, too. Sometimes this can be crucial in these days of very complex projects. So much for Title I.

Title II sets up the Corporation for Public Broadcasting which is to be private in character but authorized to receive government funds as well. The Carnegie Commission stressed the essential insulation from political control by government so that there would be no influence on programming or the distribution of such funds to individual educational broadcasting stations. You know the old saw—*Money Talks*. This is the problem; to supply Federal funds to educational broadcasting without compromising the freedom of the Corporation. Carnegie proposed that a trust fund be set up—similar to the Highway Trust Fund—and that this ETV Trust Fund would receive money from an excise tax of up to 5% on new television sets. Such a tax would now yield in excess of \$150,000,000 per year. The idea is that once the tax is enacted, the money would flow continuously and all the Congress would have to do each year would be to authorize the spending of the requested amounts assuming that much was in the kitty. This is the way matters are handled with regard to releasing funds to finance the interstate highway system.

One other way to insulate this corporation from political control is to give it a powerful board. The first two nominees, all of whom must also be approved by the Senate, are Milton Eisenhower and James Killian. Men of this stripe are as independent of any pressure as can possibly be imagined. But the House of Representatives added a hooker that no more than 8 could be members of one political party. Representative Springer of Illinois who sponsored this amendment pointed out that a similar limitation on the membership of the Federal Communications Commission had seemed to work well.

The Corporation for Public Broadcasting generally has the mandate to facilitate the full development of educational broadcasting. This is to be accomplished by

a number of activities which are specified and some which are not, for example:

1. To receive private and public funds and arrange for the constructive use of these funds to improve educational broadcasting.

2. To make contracts and grants with educational stations, and with public and private program production entities, either in this country or elsewhere, for the production of high quality programming for distribution to educational broadcasting stations.

3. To make operational grants to educational broadcasting stations to help pay the costs of broadcasting—engineers, power, etc.—plus the content costs of good local programs. Hopefully such funds will be granted on some formula which would be fair to all.

4. To maintain a library of high quality programming from which stations can draw.

5. To develop public awareness of and to disseminate information about educational broadcasting so that the public will be encouraged to take advantage of the services offered.

6. To arrange, by grant or contract with appropriate public or private agencies, organizations, etc., for the interconnection of educational broadcasting stations for distributing programs to them. This could mean dedicated micro-wave links, AT&T facilities, or even satellites. The concept here differs from the usual network arrangement where hundreds of stations broadcast the same program simultaneously. As conceived by the Carnegie Commission, the electronic links would be used 24 hours per day to distribute whatever programs the Corporation had to offer. At each station location video tape copies would be made with the station left free to reject the program or to play it and to do so at any time which suits its best judgment. This concept is still possible although it seems quite likely that some periods in the 24 hour span will be used for simultaneous broadcasting of a schedule of programs probably produced by NET—National Educational Television and any other similar organizations like the Public Broadcasting Laboratory.

7. There are other incidental activities such as research and the training of personnel to which the Corporation can lend support. In general the Corporation for Public Broadcasting is to encourage the growth of educational broadcasting and to do all it can to improve the quality of the programming.

For all these good purposes there is authorized to be appropriated in the current fiscal year \$9,000,000 to be available until expended. These funds will be general funds and no one knows yet how much will be appropriated because the appropriation bill has yet to pass. With fiscal year 1968 nearly half over it is quite possible a smaller amount may be appropriated. This \$9,000,000, or whatever it turns out to be, is considered seed money to get the Corporation started and to provide some money to some very hungry stations. Meanwhile, President Johnson has promised to make recommendations concerning future permanent financing in the next few months so that the problem of long-term finance can be

settled in 1968. Most people are against yearly appropriations from general revenues because this entails a review of past performance and justification of future planning in such detail as to abridge the necessary freedom of this corporation. On the other hand Treasury officials and others oppose dedicated taxes and call an excise tax on television sets particularly regressive. To solve this problem, there has been appointed a special committee to formulate recommendations for submission to Congress in the next session.

There is yet one more Title in the Act—Title III, which mandates an exhaustive study of the instructional television field. You will recall that this was not looked into by the Carnegie Commission, but which also viewed this as a separate and very important problem. Not only is the new study to involve television, but it should include the interrelationships between all educational media and produce recommendations for future Congressional action to support this promising field of educational technology. Many feel—and with good evidence—that ITV will ultimately eclipse in importance the total effect of public broadcasting. Already closed circuit television is used in a bewildering array of formats at all levels of education.

That, then is the Public Broadcasting Act of 1967.

This legislation has been anticipated for many months now and this has given program managers in educational broadcasting a chance to glimpse blue sky through the usual lowering clouds of penury. Hopefully they would include in their plans for the future some more comprehensive programming on the various aspects of meteorology including weather reporting. Obviously so much more could be done by including actual satellite pictures and by the addition of other important aspects such as air pollution, water pollution and the like. To see if these gentlemen were in fact considering any such things I sent out a questionnaire to all educational television stations in July 1967. Educational radio stations should have been contacted too but my funds were limited. So are their budgets! So I have left that for others to check. Educational radio also stands to benefit from the largesse doled out by the Corporation for Public Broadcasting. Well, what does the record show?

Question 1: Do you broadcast weather reports?

19 ETV stations said “yes”; 56 said “no.” I have a list of these stations with me for those who have a specific interest. 11 reported that they do a weather program once a day; 4 said they do between 2 and 5 daily broadcasts. None were over 5; 4 did not indicate which.

Question 2: Where do you get your weather information?

11 stations indicated that they relied on teletype; 15 secured their information from the local weather bureau and 4 from local airports. Obviously some stations used more than one source. Penn State does a comprehensive weather analysis with staff from the academic meteorology department.

Question 3: Do you rewrite the material you receive?

I was curious as to how much weather reporting was simply "rip 'n' read." 8 stations admitted to the practice.

Question 4: Do you collaborate with a professional meteorologist in preparing weather features?

7 said "yes"; 19 said "no." It would appear that there is at least an unfulfilled need for such assistance. We also asked if a professional was available to help. 14 said "yes"; 13 "no." Apparently more professionals could be involved if the proper rapport develops.

Question 5: Do you see any opportunity to perform a more complete weathercasting service than is now provided by commercial stations?

17 thought there was a need for better weather programming. 29 felt that the commercial broadcasters did an adequate job. Here again is evidence that there is an unfulfilled need which you ladies and gentlemen could help to fill.

Question 6: Weathercasting has generally been limited to hot and cold; rain and shine; and in between. Would you anticipate an increased public interest in weathercasting if the coverage were broadened to include material on air pollution, water pollution and general environmental conditions?

31 indicated that they believed the public would support better weathercasting. 14 weren't so sure.

Question 7: Do you have plans to increase the amount and quality of your weathercasting if additional funds should become available as they might through the Public Broadcasting Act?

25 stations, or 1/3 of those replying, would try to instigate or improve weather programs if funds became available. Perhaps this isn't as large a percentage as I hoped to find, but it is significant. I heard from only 75 stations of the total of 125 at that time, so it would seem that at least 40 stations might be interested in upgrading their weathercasting. I also tried to check whether the stations would attach high priority to improving their weathercasting—or low priority. Only 1/3 of those replying would give it high priority. But still there is a considerable area of hope that there will be more and better weathercasting together with contributory programs to enlarge the knowledge of the general public relative to meteorology.

Question 8: What would you like to do in the area of weathercasting?

I thought you might be interested in a sample of these suggestions. For example, KAET—Channel 8, Arizona State University in Tempe, Arizona, writes:

"We would like to give more explanation of weather conditions around the nation and broaden the scope of the presentation as compared with the local stations' weather programs. It is necessary for us to find a quali-

fied meteorologist to serve as host and thus far we have been unable to do so."

KLRN—Channel 9, Southwest Texas Educational Television Council, Austin, Texas, makes this comment:

"We are trying to develop a TV series on weather for airplane and boat pilots."

WIPR-WIPM—Channels 6 & 3, respectively, in Puerto Rico stress the educational aspects:

"Films of historical value of major weather events; daily forecasts and major occurrences in past years."

WET—Channel 30, Atlanta, Georgia (quite a call letter), writes as follows:

". . . environmental factors affecting health—an examination of the influences of weather on economic and social conditions. . . ."

WTXT—Channel 5, Texas Technological College, Lubbock, Texas, reports that the commercial stations do well enough. (Many other ETV stations report the same.) Then they go on to add (since nothing can possibly be wrong with Texas) that:

"Pollution, etc., is no problem in this area . . . just tornadoes and sandstorms."

KBYU—Channel 11, Brigham Young University, Provo, Utah, brings out a personality problem:

"One local station uses meteorologist, but ratings are well below 'personality' on another station."

This just states a truth that a meteorologist has not only to be smart; he has to be beautiful too. Or shall we leave that to the girl meteorologists, God bless them.

WETA—Channel 26 in our Nation's Capital writes:

"Include marine and aviation weather conditions for boating and flying interests (we usually include air pollution index)."

WTVS—Channel 56, Detroit Education TV Foundation, Detroit, Michigan, reports that the commercial stations carry the ball:

". . . comprehensive weathercasts as they do now on a regularly scheduled basis. We also receive Canadian weathercasts which are outstanding and complete."

To those of you in the know, is it a fact that the Canadians do better in weathercasting than we do? I'll yield to anyone who wishes to defend us.

WHA—Channel 21, University of Wisconsin, Madison, Wisconsin, plans:

"features on the determination of weather patterns."

WILL—Channel 12, The University of Illinois, Urbana, Illinois, suggests:

"A 3-dimensional visual presentation (of weather)."

WGTV—Channel 8, The University of Georgia, Athens, Georgia, reports that it has done:

"a series of programs on 'Weathercasting for the Layman.'"

(including probably the proper use of the wet finger.)

KTEH—Channel 54, San Jose, California—a public school station—states that they are:

"presently considering a weather program for elementary school children."

And finally, *KERA—Channel 13*, Dallas, Texas, reports that it hopes to provide:

"More information on weather background and history; development and interest in weathercasting . . .

detailed explanation of development and use of weather instruments."

You can tell better than I if these suggestions make sense and whether by increasing the cooperation between you and the public broadcasting stations, you might together provide better weather services to the general and specialized publics. As from one viewer to another, I think there is plenty of room for improvement and public broadcasting should indeed present that opportunity.

Good luck to you and thank you very much for inviting me to meet with you.

news and notes

Deputy coordinator of federal meteorological programs

The appointment of Clarence E. Roache as Deputy Federal Coordinator for Meteorological Services and Supporting Research was announced in March by the Environmental Science Services Administration, Department of Commerce. The Office of Federal Coordinator was established in 1964 to review the meteorological programs of all federal agencies and prepare an annual federal plan for meteorological services and supporting research. Dr. Robert M. White, ESSA administrator, has held the post of federal coordinator since the office was established. As deputy coordinator, Mr. Roache is the full-time head of the office.

Before his new appointment, Mr. Roache had been chief

of operating programs in the Office of the Federal Coordinator since December 1964. In this position he was head of the Interdepartmental Committee for Meteorological Services and was responsible for the portion of the Federal Plan dealing with the operational weather services.

Mr. Roache was born in Ellicott City, Md., and graduated from St. John's College in Annapolis in 1939. After graduation he enlisted in the Air Force and was trained in weather forecasting. He remained in the U. S. Air Force Air Weather Service until 1964, except for one year with the Weather Bureau in 1945–1946.

From 1960 to 1964 he was director of operations at AWS headquarters, responsible for staff activities in the fields of operational requirements, systems design, communications, training, and data acquisition. After serving from May to December 1964 as military advisor to the chief of the Weather Bureau, he retired from the Air Force with the rank of colonel.

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