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ALL CHANNEL TELEVISION RECEIVERS AND DEINTERMIXTURE

HEARINGS

BEFORE THE

COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE HOUSE OF REPRESENTATIVES

EIGHTY-SEVENTH CONGRESS

SECOND SESSION

ON

H.R. 8031

A BILL TO AMEND THE COMMUNICATIONS ACT OF 1934 IN ORDER TO GIVE THE FEDERAL COMMUNICATIONS COMMISSION CERTAIN REGULATORY AUTHORITY OVER TELEVISION RECEIVING APPARATUS

H.R. 9267, H.R. 9277, H.R. 9291, H.R. 9293, and H.R. 9322

BILLS TO PLACE CERTAIN LIMITATIONS ON THE AUTHORITY OF THE FEDERAL COMMUNICATIONS COMMISSION TO DELETE PREVIOUSLY ASSIGNED VERY HIGH FREQUENCY TELEVISION CHANNELS, TO GIVE THE COMMISSION CERTAIN REGULATORY AUTHORITY OVER TELEVISION RECEIVING APPARATUS, AND FOR OTHER PURPOSES

H.R. 9349

A BILL TO AMEND THE COMMUNICATIONS ACT OF 1934, SO AS TO CLARIFY THE INTENT OF CONGRESS WITH RESPECT TO THE AUTHORITY OF THE FEDERAL COMMUNICATIONS COMMISSION IN THE ALLOCATION OF TELEVISION CHANNELS

H. Res. 450

REQUESTING THE FEDERAL COMMUNICATIONS COMMISSION TO CONTINUE ALL VERY HIGH FREQUENCY TELEVISION BROADCASTING UNTIL THE COMMISSION'S PENDING ULTRA-HIGH-FREQUENCY STUDY IS COMPLETED AND A FULL AND DETAILED REPORT IS AVAILABLE TO THE CONGRESS AND THE PUBLIC

H. Res. 457

OPPOSING THE FEDERAL COMMUNICATIONS COMMISSION'S POSITION REGARDING HIGH FREQUENCY AND ULTRA HIGH FREQUENCY TELEVISION STATIONS

H. Res. 469

THAT THE FEDERAL COMMUNICATIONS COMMISSION SHOULD NOT ADOPT ANY ACTION REQUIRING PRESENT VERY HIGH FREQUENCY TELEVISION STATIONS TO CHANGE ITS OPERATION TO ANY CHANNEL OTHER THAN ANOTHER OF THE PRESENT VERY HIGH FREQUENCY CHANNELS

MARCH 5, 6, 7, AND 9, 1962

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ALL-CHANNEL TELEVISION RECEIVERS AND DEINTERMIXTURE

MONDAY, MARCH 5, 1962

HOUSE OF REPRESENTATIVES,
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.

The committee met, pursuant to notice, at 10:20 a.m., in room 1334, New House Office Building, Hon. Oren Harris (chairman of the committee) presiding.

The CHAIRMAN. The committee will come to order.

We are delighted to have so many of our colleagues here this morning. I see our distinguished colleague from the Senate, as well as many members of the House who are interested in the subject matter that we initiate hearings on this morning.

This morning our Committee on Interstate and Foreign Commerce is beginning hearings on a number of bills which in my opinion hold the key to the future of television in the United States. I consider these bills of the utmost importance and I hope that the record of the hearings which we are beginning this morning will point up very clearly the important issues which are involved in this legislation.

The first bill on which we are holding hearings is H.R. 8031, which I introduced at the request of the Federal Communications Commission. This bill would give the Commission authority to establish minimum performance standards for television sets marketed in interstate commerce. The purpose of the bill is to assure that television sets marketed in interstate commerce will be capable of receiving all VHF and UHF television channels.

Hearings will be held at the same time on H.R 9267 of our colleague, Mr. Roberts of Alabama and several identical bills, H.R. 9277 of Mr. Moss, H.R. 9291 of Mr. Anderson of Illinois, H.R. 9293 of Mr. Hemphill, H.R. 9322 by our beloved late colleague Mr. Riley, which provide for all-channel receivers and in addition prohibit the deletion of any VHF channel heretofore assigned to any community by the Federal Communications Commission.

The hearings also will cover H.R. 9349, by our colleague, Mr. Mack, which directs the Commission in assigning VHF and UHF channels, not to give any undue preference to, and not to discriminate against, any commodity or region; House Resolution 450, by Mr. Thomson of Wisconsin, and House Resolution 457, by Mr. Andrews, which seek to postpone any reassignment to VHF television channels until the Commission has completed an engineering study of the effectiveness of UHF telecasting previously authorized by the Congress; and House Resolution 469, by Mr. Grant of Alabama which expresses the sense

of the Congress that the Commission shall leave unchanged present VHF assignments.

The purpose of some of these bills is to expand television services in the United States by activating additional UHF (ultrahigh frequency) stations. At present, 450 television stations are crowded into 12 VHF (very high frequency) channels, while only 76 stations are operating on 70 UHF channels which could accommodate numerous additional television stations.

The bills and resolution which seek to prevent, temporarily or indefinitely, the substitution of UHF channels for VHF channels in communities to which such VHF channels are now assigned are aimed particularly at certain Commission proposals to so modify the assignment of television frequencies in some selected communities which at present have both UHF and VHF stations, that they will be transformed into all UHF telecasting (so-called deintermixture proceedings).

I note that the interest in these hearings both on the part of Members of Congress and on the part of organizations and individuals is very great. Therefore, we have set aside this first day of hearings to hear testimony from several of our colleagues in the Congress who are deeply concerned with some of the Commission proposals which would delete VHF channels assigned to their communities. The committee will make every effort to hear all the witnesses who have expressed a desire to be heard, but I would like to request the witnesses right from the beginning to be as brief as possible and to avoid repetitious testimony. The committee is most anxious to complete these hearings during this week because we have already scheduled for next week hearings on another important aspect of communications namely, communications space satellites. Therefore, unless we are able to complete these hearings as scheduled, our committee will have great difficulties completing its crowded program.

(The bills and agency reports referred to follow:)

[H.R. 8031, 87th Cong., 1st sess.]

A BILL To amend the Communications Act of 1934 in order to give the Federal Communications Commission certain regulatory authority over television receiving apparatus.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 303 of the Communications Act of 1934 (47 U.S.C. 303) is amended by inserting at the end thereof the following:

"(s) Have authority, whenever the objectives of this Act so require, to prescribe minimum performance capabilities for apparatus designed to receive television pictures broadcast simultaneously with sound, when such apparatus is traded or shipped in interstate commerce, or is imported from any foreign country into the United States, for sale or resale to the public."

SEC. 2. Part 1 of title III of the Communications Act of 1943 is amended by inserting at the end thereof a new section as follows:

"TRADING IN APPARATUS DESCRIBED IN SECTION 303(S)

"SEC. 330. No person shall trade or ship in interstate commerce, or import from any foreign country into the United States, for sale or resale to the public, apparatus described in paragraph (s) of section 303 unless it complies with minimum performance capabilities prescribed by the Commission pursuant to that paragraph: *Provided*, That this section shall not apply to carriers transporting such apparatus without trading in it."

[H.R. 9267, 87th Cong., 1st sess.]

A BILL To place certain limitations on the authority of the Federal Communications Commission to delete previously assigned very high frequency television channels, to give the Commission certain regulatory authority over television receiving apparatus, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That paragraph (c) of section 303 of the Communications Act of 1934 is amended by inserting immediately before the semicolon at the end thereof the following: ", but nothing in this Act shall authorize the Commission to delete the assignment of any television frequency between fifty-four megacycles and two hundred and sixteen megacycles (very high frequency channels) made to any community on or prior to September 1, 1961, for the purpose of having all commercial and educational television stations in that community operate on frequencies outside the frequency band between fifty-four megacycles and two hundred and sixteen megacycles (very high frequency channels)".

SEC. 2. Such section 303 is further amended by adding at the end thereof the following new paragraph:

"(s) Have authority to require that apparatus designed to receive television pictures broadcast simultaneously with sound be capable of receiving all frequencies allocated by the Commission to television broadcasting, including frequencies between fifty-four megacycles and two hundred and sixteen megacycles (very high frequency channels) so allocated on September 1, 1961, and to prescribe minimum performance capabilities for such apparatus appropriate to such requirement, when such apparatus is traded, shipped, or transported in interstate commerce, or is imported from any foreign country into the United States, for sale or resale to the public."

SEC. 3. Title III of such Act is amended by adding at the end thereof the following new section:

"PROHIBITION AGAINST SHIPMENT OF CERTAIN TELEVISION SETS

"SEC. 330. No person shall trade, ship, or transport in interstate commerce, or import from any foreign country into the United States, for sale or resale to the public, apparatus described in paragraph (s) of section 303 unless it complies with the requirements prescribed by the Commission pursuant to the authority provided in that paragraph: *Provided*, That this section shall not apply to carriers transporting such apparatus without trading in it."

[H.R. 9277, 87th Cong., 1st sess.]

A BILL To place certain limitations on the authority of the Federal Communications Commission to delete previously assigned very high frequency television channels, to give the Commission certain regulatory authority over television receiving apparatus, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That paragraph (c) of section 303 of the Communications Act of 1934 is amended by inserting immediately before the semicolon at the end thereof the following: "but nothing in this Act shall authorize the Commission to delete the assignment of any television frequency between 54 megacycles and 216 megacycles (very high frequency channels) made to any community on or prior to September 1, 1961, for the purpose of having all commercial and educational television stations in that community operate on frequencies outside the frequency band between 54 megacycles and 216 megacycles (very high frequency channels)".

SEC. 2. Such section 303 is further amended by adding at the end thereof the following new paragraph:

"(s) Have authority to require that apparatus designed to receive television pictures broadcast simultaneously with sound be capable of receiving all frequencies allocated by the Commission to television broadcasting, including frequencies between 54 megacycles and 216 megacycles (very high frequency channels) so allocated on September 1, 1961, and to prescribe minimum performance capabilities for such apparatus appropriate to such requirement, when such apparatus is traded, shipped, or transported in interstate commerce, or is imported from any foreign country into the United States, for sale or resale to the public."

SEC. 3. Title III of such Act is amended by adding at the end thereof the following new section:

"PROHIBITION AGAINST SHIPMENT OF CERTAIN TELEVISION SETS

"SEC. 330. No person shall trade, ship, or transport in interstate commerce, or import from any foreign country into the United States, for sale or resale to the public, apparatus described in paragraph (s) of section 303 unless it complies with the requirements prescribed by the Commission pursuant to the authority provided in that paragraph: *Provided*, That this section shall not apply to carriers transporting such apparatus without trading in it."

[H.R. 9291, 87th Cong., 1st sess.]

A BILL To place certain limitations on the authority of the Federal Communications Commission to delete previously assigned very high frequency television channels, to give the Commission certain regulatory authority over television receiving apparatus, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That paragraph (c) of section 303 of the Communications Act of 1934 is amended by inserting immediately before the semicolon at the end thereof the following: ", but nothing in this Act shall authorize the Commission to delete the assignment of any television frequency between fifty-four megacycles and two hundred and sixteen megacycles (very high frequency channels) made to any community on or prior to September 1, 1961, for the purpose of having all commercial and educational television stations in that community operate on frequencies outside the frequency band between fifty-four megacycles and two hundred and sixteen megacycles (very high frequency channels)".

SEC. 2. Such section 303 is further amended by adding at the end thereof the following new paragraph:

"(s) Have authority to require that apparatus designed to receive television pictures broadcast simultaneously with sound be capable of receiving all frequencies allocated by the Commission to television broadcasting, including frequencies between fifty-four megacycles and two hundred and sixteen megacycles (very high frequency channels) so allocated on September 1, 1961, and to prescribe minimum performance capabilities for such apparatus appropriate to such requirement, when such apparatus is traded, shipped, or transported in interstate commerce, or is imported from any foreign country into the United States, for sale or resale to the public."

SEC. 3. Title III of such Act is amended by adding at the end thereof the following new section:

"PROHIBITION AGAINST SHIPMENT OF CERTAIN TELEVISION SETS

"SEC. 330. No person shall trade, ship, or transport in interstate commerce, or import from any foreign country into the United States, for sale or resale to the public, apparatus described in paragraph (s) of section 303 unless it complies with the requirements prescribed by the Commission pursuant to the authority provided in that paragraph: *Provided*, That this section shall not apply to carriers transporting such apparatus without trading in it."

[H.R. 9293, 87th Cong., 1st sess.]

A BILL To place certain limitations on the authority of the Federal Communications Commission to delete previously assigned very high frequency television channels, to give the Commission certain regulatory authority over television receiving apparatus, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That paragraph (c) of section 303 of the Communications Act of 1934 is amended by inserting immediately before the semicolon at the end thereof the following: ", but nothing in this Act shall authorize the Commission to delete the assignment of any television frequency between fifty-four megacycles and two hundred and sixteen megacycles (very high frequency channels) made to any community on or prior to September 1,

1961, for the purpose of having all commercial and educational television stations in that community operate on freqencies outside the frequency band between fifty-four megacycles and two hundred and sixteen megacycles (very high frequency channels)".

SEC. 2. Such section 303 is further amended by adding at the end thereof the following new paragraph:

"(s) Have authority to require that apparatus designed to receive television pictures broadcast simultaneously with sound be capable of receiving all frequencies allocated by the Commission to television broadcasting, including frequencies between fifty-four megacycles and two hundred and sixteen megacycles (very high frequency channels) so allocated on September 1, 1961, and to prescribe minimum performance capabilities for such apparatus appropriate to such requirement, when such apparatus is traded, shipped, or transported in interstate commerce, or is imported from any foreign country into the United States, for sale or resale to the public."

SEC. 3. Title III of such Act is amended by adding at the end thereof the following new section:

"PROHIBITION AGAINST SHIPMENT OF CERTAIN TELEVISION SETS

"SEC. 330. No person shall trade, ship, or transport in interstate commerce, or import from any foreign country into the United States, for sale or resale to the public, apparatus described in paragraph (s) of section 303 unless it complies with the requirements prescribed by the Commission pursuant to the authority provided in that paragraph: *Provided*, That this section shall not apply to carriers transporting such apparatus without trading in it."

[H.R. 9322, 87th Cong., 1st sess.]

A BILL To place certain limitations on the authority of the Federal Communications Commission to delete previously assigned very high frequency television channels, to give the Commission certain regulatory authority over television receiving apparatus, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That paragraph (c) of section 303 of the Communications Act of 1934 is amended by inserting immediately before the semicolon at the end thereof the following: ", but nothing in this Act shall authorize the Commission to delete the assignment of any television frequency between fifty-four megacycles and two hundred and sixteen megacycles (very high frequency channels) made to any community on or prior to September 1, 1961, for the purpose of having all commercial and educational television stations in that community operate on frequencies outside the frequency band between fifty-four megacycles and two hundred and sixteen megacycles (very high frequency channels)".

SEC. 2. Such section 303 is further amended by adding at the end thereof the following new paragraph:

"(s) Have authority to require that apparatus designed to receive television pictures broadcast simultaneously with sound be capable of receiving all frequencies allocated by the Commission to television broadcasting, including frequencies between fifty-four megacycles and two hundred and sixteen megacycles (very high frequency channels) so allocated on September 1, 1961, and to prescribe minimum performance capabilities for such apparatus appropriate to such requirement, when such apparatus is traded, shipped, or transported in interstate commerce, or is imported from any foreign country into the United States, for sale or resale to the public."

SEC. 3. Title III of such Act is amended by adding at the end thereof the following new section:

"PROHIBITION AGAINST SHIPMENT OF CERTAIN TELEVISION SETS

"SEC. 330. No person shall trade, ship, or transport in interstate commerce, or import from any foreign country into the United States, for sale or resale to the public apparatus described in paragraph (s) of section 303 unless it complies with the requirements prescribed by the Commission pursuant to the authority provided in that paragraph: *Provided*, That this section shall not apply to carriers transporting such apparatus without trading in it."

[H.R. 9349, 87th Cong., 1st sess.]

A BILL To amend the Communications Act of 1934, so as to clarify the intent of Congress with respect to the authority of the Federal Communications Commission in the allocation of television channels

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 3 of the Communications Act of 1934 (47 U.S.C. 153) is amended by adding at the end thereof the following new paragraphs:

"(ff) 'Very high frequency band' means that part of the radio spectrum between thirty and three hundred megacycles.

"(gg) 'Ultra high frequency band' means that part of the radio spectrum between three hundred and three thousand megacycles."

SEC. 2. Subsection (b) of section 307 of the Communications Act of 1934 (47 U.S.C. 307) is amended by adding at the end thereof the following new sentence: "It shall be unlawful for the Commission, in allocating television channels in the very high frequency and ultra high frequency bands, (1) to give any undue or unreasonable preference or advantage to any particular municipality, locality, or region, or (2) to subject any particular municipality, locality, or region to any undue or unreasonable prejudice or disadvantage."

[H. Res. 450, 87th Cong., 1st sess.]

RESOLUTION

Whereas the Federal Communications Commission has sought congressional appropriations in excess of $2 million for the purpose of conducting a special engineering study of telecasting on ultrahigh frequencies to explore the effectiveness of ultra-high-frequency television service, to determine the proper place of ultrahigh frequencies in our nationwide television system, to provide required additional information upon which basic administrative decisions on television channel allocation can properly be made, and to inquire into ways and means of improving ultra-high-frequency receivers and antennas; and

Whereas the Eighty-sixth Congress, on the basis of the foregoing requests, has appropriated funds in the amount of $2 million for the conduct of such an experimental Commission study of ultra-high-frequency telecasting to be held in New York City; and

Whereas the Commission's ultra-high-frequency study is now only in the preparatory stage with operations not scheduled to commerce until late 1961 and the final results thereof pursuant to a 6-month extension recently requested of Congress by the Commission not scheduled to be ready until January 1963, or thereafter; and

Whereas it is recognized at the Commission and throughout the broadcasting industry that under the present state of the art, very high frequency channels and service are directly superior to the ultrahigh frequency in terms of wider coverage, receiver and antenna characteristics, and more widespread distribution of very high frequency receivers; and

Whereas the Commission, without awaiting the conduct or results of its experimental study of the ultrahigh frequency has, by proceedings instituted on July 27, 1961, now proposed to take far-reaching allocations actions which would require the deletion of existing very high frequency channels on an ad hoc basis in a number of American cities and would compel the very high frequency stations operating thereon to abandon their wider coverage very high frequency service so as to shift over to ultra-high-frequency channels and service; and

Whereas the results of the Commission's experimental ultra-high-frequency study for which substantial funds were appropriated would demonstrably be critical to any proper evaluation of the pending Commission proposals to delete existing very high frequency channels and service in favor of the ultrahigh frequency: Now, be it and it is hereby

Resolved, That it is the sense of the House of Representatives that the Federal Communications Commission should take no further action in those proceedings instituted by it on July 27, 1961, which would look to or would compel any television station operating on a very high frequency to shift therefrom to an ultrahigh frequency, until the Commission's pending ultra-high-frequency study shall have been completed and a full and detailed report on the procedures, data, findings, and results of such study shall have been made readily available to the Congress and to the public.

[H. Res. 457, 87th Cong., 1st sess.]

RESOLUTION

Resolved, That the House of Representatives is opposed to the Federal Communications Commission's conducting any proceedings or taking any other action looking toward the involuntary change of any commercial or educational television station from a very high frequency to an ultra high frequency until at least six months after the study of ultra high frequency television broadcasting for which funds were appropriated by the Eighty-sixth Congress shall have been completed and a full, complete, and detailed report on the procedures, findings, and results of such study, together with data collected during the study, shall have been made readily available to the Congress and to the public.

[H. Res. 469, 87th Cong., 1st sess.]

RESOLUTION

Resolved, That it is the sense of the House of Representatives of the United States of America, that the present very high frequency television channels (channels 2–13) are particularly well suited to providing reliable high technical quality television service to the public throughout wide areas, especially in small and medium-sized communities and in the rural, farm, and other outlying sections of the Nation, that the present very high frequency channels are therefore absolutely essential to a nationwide television system in the public interest and none of them should be wasted, that stations now operating on the present very high frequency channels provide television service which is especially vital to the public, and that it would be contrary to the public interest for the public to be deprived of, or to have impaired, the television service it now receives from the existing stations operating on the present very high frequency channels; and be it further

Resolved, That it is therefore the sense of the House of Representatives of the United States of America that the Federal Communications Commission should not conduct any proceedings, or adopt or promulgate any rule or order, or take any other action which looks toward or which would require a commercial or educational television station now operating on one of the present very high frequency television channels (channels 2–13) to change its operations to any channel other than another of the present very high frequency television channels (channels 2–13).

FEDERAL COMMUNICATIONS COMMISSION,
Washington, D.C., July 18, 1961.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR CHAIRMAN HARRIS: This will acknowledge receipt of your letter of July 11, 1961, enclosing for the Commission's comments H.R. 8031, a bill to amend the Communications Act of 1934 in order to give the Federal Communications Commission certain regulatory authority over television receiving apparatus.

This bill is part of the Commission's legislative program for the 87th Congress, and was transmitted to you on June 15, 1961. We have no further comment to make other than that contained in our memorandum of explanation which accompanied our proposal, a copy of which is enclosed.

Sincerely yours.

NEWTON N. MINOW, *Chairman.*

JUSTIFICATION FOR PROPOSED AMENDMENTS TO THE COMMUNICATIONS ACT, WHICH WOULD EMPOWER THE FEDERAL COMMUNICATIONS COMMISSION TO REGULATE THE PERFORMANCE CHARACTERISTICS OF TELEVISION RECEIVERS (47 U.S.C. 303, 330)

In the Communications Act of 1934, Congress vested the Federal Communications Commission with the responsibility of making available to all people of the United States, an efficient and nationwide communications service, and certain authorities to carry out these responsibilities. Our request for this legislation is an expression of our feeling that in the area of television reception

systems, our present authority is not commensurate with our responsibilities, and of our belief that Commission jurisdiction over the performance capabilities of television receivers is necessary to carry out this responsibility. Identical legislation was introduced in the Senate, and similar legislation in the House, during the 86th Congress at the behest of this Commission.

By its very nature, the electromagnetic spectrum is limited, resulting in a ceiling on the number of channels which might be utilized for television. Therefore, to get the greatest television service possible, expansion must be in the direction of more efficient utilization of the portion of the spectrum available for television.

The portion of the spectrum available for nongovernmental television use provides 82 channels. Of these 82 cannels, 12 are in the VHF portion of the spectrum and 70 are in the UHF portion. Notwithstanding the availability of many more UHF channels than VHF for television broadcasting, the present situation finds most of the television broadcasting stations crowded into the 12 VHF channels, leaving 70 UHF chanels only sparsely occupied. The existing television service is being provided by approximately 450 VHF stations and only 76 UHF stations.

A major reason why the 70 UHF channels are only sparsely occupied is the scarcity of television receivers which are capable of tuning to the UHF frequencies. It is estimated that some 52 million television receivers throughout the country, only some 8.7 million (less than 17 percent) are capable of receiving television signals which are broadcast in the ultrahigh frequencies (UHF). In 1959, of some 6.35 million television sets manufactured, approximately 7 percent, or less than half a million, are capable of receiving UHF signals.

The production of all-channel receivers is somewhat more expensive than either VHF only or UHF only receivers. We are advised, however, that mass production of all-channel receivers would substantially reduce the price differential between VHF only receivers and all-channel receivers. In any event, we must face the fact that the considerations which impel manufacturers to produce 12-channel sets (VHF only) are fundamentally inconsistent with our allocation of, and national need for, 82 channel channels for television broadcasting. In our view, the two cannot be reconciled.

The scarcity of television receivers capable of tuning to the UHF channels discourages broadcasting on the UHF channels because of the great initial disadvantage of the limited potential audience. UHF stations find it difficult, and in most cases impossible, to compete in markets served by VHF stations mainly because of the aroused skepticism on the part of the advertisers who show a marked preference for VHF outlets in sponsoring programs. UHF broadcasting has only proven to be a success in those few areas where there is no competition with VHF broadcasting. The viewing public has not shown any willingness to unilaterally purchase receivers capable of receiving UHF signals except in those areas where no VHF programs are available. The result is that the public has shown that it will not purchase UHF sets until there are more UHF broadcasters and UHF broadcasting will not increase until the public purchases UHF sets.

The Commission, in order to provide adequate television service within this framework, has examined various methods of extending the use of the 12 VHF channels from merely reducing present minimum cochannel and adjacent channel spacing to an overall reshuffling of television assignments. It has explored the various factors which have frustrated full realization of the goals set forth in its Sixth Report and Order, and it has concluded that although immediate shortages in some communities could be alleviated, no rearrangement of the assignments of the 12 VHF channels can provide for an efficient nationwide television system, adequate for the needs of our growing population and expanding economy. Moreover, the negative reply of OCDM regarding the possibility of obtaining additional VHF spectrum space from the Government makes it clear that television cannot be expanded in the VHF portion of the spectrum in the foreseeable future.

The Commission has now concluded that adequate nationwide television service is not possible within the framework of the 12 VHF channels and that greater use must be made of all of the 82 channels allocated to television, including the 70 UHF channels.

We must recognize receiver incompatibility as a major factor inhibiting development of UHF stations. The Commission proposes to combat receiver incompatibility by legislation designed to promote the manufacture and sale of all-

channel receivers capable of satisfactorily receiving UHF television signals. It should be noted that the Commission, in 1952, in its Sixth Report and Order, concluded that a free intermixture of VHF and UHF channels is the solution to the allocations problem. However, to date, the utilization of the UHF has failed to come up to the Commission's expectations in its role as a part of the allocations plan. In a statement to the Senate Interstate and Foreign Commerce Committee on February 2, 1960, our Chairman concluded that deintermixing the VHF and UHF assignments to individual cities would not satisfactorily solve the allocations problem facing television broadcasting.

After very comprehensive study over the past several years and repeated exploration of every possibility that has been suggested, we believe the most feasible course with a reasonable prospect for success is the enactment of the legislation to promote the distribution of all-channel receivers.

Without the receiver legislation development of UHF stations will continue to be retarded. In the face of the limited use of the large portion of UHF spectrum space now allocated to television broadcasting, it may be necessary to surrender substantial portions for other processing needs. The result will be the ultimate confinement of television broadcasting to the wholly inadequate 12-channel VHF system.

It is clear that the 12 VHF channels do not provide adequate opportunities for growth to meet the demand of our expanding economy and that full use must be made of all 82 channels available for television. Any attempts to "squeeze in" any substantial number of additional VHF stations can only result in serious degradation of the quality of television service to metropolitan areas and virtual elimination of such service to many rural areas. Obviously, such a program could not provide an adequate solution to this problem.

Another aspect of this problem which is of deep concern to the Commission is the development of noncommercial educational television and the desire that adequate television services be made available to as many people as possible. This concern is demonstrated by the fact that a television channel (VHF or UHF) has been reserved for educational use in every large city or educational center in the country. But in many areas where educational service is needed and desired, there are no available VHF channels, necessitating an assignment of a UHF channel to an educational broadcaster. Because of this lack of available VHF channels, the growth and expansion of educational broadcasting must be in the UHF, making the growth of educational television go hand in hand with the growth of the utilization of the UHF. Educational broadcasters find the UHF at the present time to be less desirable (as the commercial stations do) because of receiver incompatibility and they are discouraged by the limited potential audience. In our view, the only hope for an adequate educational television service lies in full utilization of the 70 UHF channels which are not now being fully exploited. So long as most generally available commercial receivers are limited to the VHF portion of the spectrum, educators will be reluctant to go forward with a program for extensive use of UHF frequencies.

If this legislation is not enacted we believe that the Nation will be handicapped with a limited television system with inadequate opportunities for local outlets and adequate educational service and effective competition. We could expect the inequities and monopolistic elements in the present system to become magnified. This would be a result opposed to our national policy and desire for increased competition and inevitably pressures will mount for the adoption of strong measures to overcome the shortages. This may include breakdowns in the technical standards to squeeze in more assignments in the VHF and such regulatory measures as rationing of time on stations.

In closing, we might mention that the UHF project in New York City, authorized by Congress, is progressing satisfactorily and every effort is being made to get the station in actual operation by early fall. One of the principal purposes of the experiment is to determine the feasibility and workability of UHF within large metropolitan areas where many receivers are shielded by high buildings. Additionally, there will be useful byproducts in the form of information concerning receiver characteristics, receiving antennas, transmitter operation, etc. As this information becomes available, it will be used to further UHF development in whatever way practicable.

In view of these circumstances, the Commission must conclude that enactment of the legislation here requested is of utmost importance to the national welfare. We believe that this proposed legislation will promote the interest of the public by better enabling the Commission to carry out its responsibility to make available so far as possible to all of the people of the United States a rapid, efficient, nationwide wire and radio communication service.

81657—62——2

CONCURRING STATEMENT OF COMMISSIONER ROBERT E. LEE

I concur in the legislation proposed. However, in justification, the Commission has stressed the need for 82 channels for broadcasting. It is my opinion that the public interest would be better served were television to be shifted to UHF, thereby promoting a more competitive and adequate television system and releasing the VHF bands to meet the needs of other services.

Adopted February 1, 1961.

U.S. DEPARTMENT OF JUSTICE,
OFFICE OF THE DEPUTY ATTORNEY GENERAL,
Washington, D.C., February 26, 1962.

HON. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This is in response to your request for the views of the Department of Justice concerning H.R. 8031, a bill to amend the Communications Act of 1934 in order to give the Federal Communications Commission certain regulatory authority over television receiving apparatus.

The bill would amend the Communications Act of 1934 by adding to the powers and duties of the Federal Communications Commission prescribed by section 303 of the act the additional authority to establish "minimum performance capabilities" for television receiving apparatus shipped or traded in interstate commerce. The purpose of the bill, it is understood, is to enable the Commission to require television manufacturers to equip receiving sets with all-channel tuners capable of receiving UHF as well as VHF television signals.

It would appear that the proposal would tend to foster additional competition in predominantly VHF television market areas by assuring present and future operators of UHF stations eventual complete coverage of their telecasting area as all-channel receivers by normal attrition gradually replaced VHF-only sets. Similarly, to the extent the proposal would encourage present UHF stations to stay in business and to stimulate the entry of new UHF outlets where additional VHF channels are unavailable, the possibility of the emergence of additional networks and strong independent program producers would be largely enhanced, resulting in a more favorable competitive situation generally in the television industry.

While the Department of Justice is in sympathy with the objective of this legislation, the wisdom and desirability of this particular approach to the UHF problem involves fundamental questions of policy upon which the Department prefers to make no recommendation. However, if the bill should receive favorable consideration, it is believed that it should be made clear, either in the language of the bill itself or in its legislative history, that all patents which would be required in order to comply with any technical standards adopted by the Commission pursuant to the bill are to be made available without restriction to all manufacturers upon the payment of reasonable royalties.

The Bureau of the Budget has advised that there is no objection to the submission of this report from the standpoint of the administration's program.

Sincerely yours,

BYRON R. WHITE,
Deputy Attorney General.

The CHAIRMAN. I would like to make this additional statement.

This begins hearings on a series of important bills affecting the communications of this country—as a matter of fact, of the world.

We have this problem of deintermixture and all-channel receiving sets, which are the short and the long range efforts toward the achievement of fuller utilization of the spectrum.

This committee also has before it the problem of clear channel that we hope to get to during this session of the Congress.

We also have this matter of daytime broadcasting on which we hope to get something done. We realize the technical problems involved. But some of these issues have been pending so long, that we

are going to try to get some decision out of this committee on them during this session of Congress.

A week from tomorrow we are starting hearings on the administration's proposal on communication satellites. That is one of the most important problems insofar as the future of communications is concerned.

These are important, far-reaching proposals, dealing with subject matters that must be resolved.

So far as I am concerned—and I believe the committee is concerned—we are going to try to deal with these subjects during this session of the Congress.

I wanted each of you interested in this to know that we are starting today a hearing that is going to reach into a lot of technical and difficult problems that we hope we can resolve during these next few months.

A number of the members of this committee have bills pending which I have referred to. However, I am sure my colleagues on the committee understand that we have so many other Members of Congress here, that perhaps we had best take them first. Our own committee will have ample opportunity to make the record and to discuss these problems on the record and within the committee itself.

If that suggestion is all right, I first would like to recognize the presence of and welcome the distinguished U.S. Senator, the Honorable Prescott Bush.

Senator, we are very glad to have you with us this morning. I personally know of your interest in this subject. We would be glad to have your comments.

STATEMENT OF HON. PRESCOTT BUSH, U.S. SENATOR FROM THE STATE OF CONNECTICUT

Senator BUSH. Thank you, Mr. Chairman. Members of the committee, I appreciate very much the courtesy you have given me in letting me appear before you this morning. I appreciate the opportunity to express my support in principle of H.R. 9267, which would require the manufacture of all-channel television receivers and which would prohibit the deletion of any VHF channel heretofore assigned to any community by the FCC.

As a member of the Governor's committee in Connecticut which has studied the deintermixture problem and how the pending FCC proposals would affect our State, I feel strongly that H.R. 9267, or legislation similar to it, should receive favorable consideration by your committee.

The FCC has proposed, in docket 14241, that our Connecticut channel 3 be converted from VHF to UHF. This proposal by the FCC has brought about one of the greatest outpourings of opposition by our citizens that I can recall in many years on any issue. People from all walks of life—in government, education, agriculture, labor, members of the clergy, civic organizations, our newspapers, military organizations, our business community—representing a cross section of our population, have risen almost as one to oppose the proposal of the FCC relating to channel 3 in Connecticut.

The citizens committee to which I refer has unanimously adopted a resolution stating that—

> the implementation of the (Commission's) proposal would be seriously prejudicial and greatly injurious to the vast number of Connecticut residents who rely on WTIC–TV on channel 3 for their only clear television service and to an additional very large number of Connecticut citizens who rely on the same station for their ability to receive a choice of television signals.

For the benefit of the committee record, Mr. Chairman, I should like to submit a copy of the Governor's committee resolution so that the members of your committee may refer themselves to the list of objections to the FCC proposal. I submit this for the record, following my remarks.

The CHAIRMAN. We are very glad to have it. We shall be glad to receive it, Senator, for the record.

Senator BUSH. Mr. Chairman, I support the concept that the FCC should be given authority to require that all television sets manufactured and shipped in interstate commerce be capable of receiving all television channels in the VHF and the UHF ranges. This I believe would be a step forward toward a solution to the problem that besets the television industry.

In giving this power to the Federal Communications Commission, however, I believe strongly that the Congress should include in the statute a prohibition against the deletion of existing VHF channels. Unless this is done we may be faced with the situation where VHF stations, such as channel 3 in Hartford, are forced to convert to UHF to the detriment of the viewing public and with the resulting great injustice that would be done to stations, such as the one I have mentioned, which has been serving the public so well over the years.

We have had hearings in the Senate recently on S. 2109, and in the testimony which was presented it became clear that much support exists for legislation which would protect the existing VHF channels from being forced to convert to UHF.

I trust that your committee, Mr. Chairman, will recommend the approval of H.R. 9267, or similar legislation. I believe that it will be in the public interest.

Mr. Chairman, again I thank the committee for its courtesy.

(The resolution referred to follows:)

Before the Federal Communications Commission, Washington, D.C.

(Docket No. 14241)

IN THE MATTER OF DEINTERMIXTURE OF HARTFORD, CONN.

COMMENTS OF THE GOVERNOR'S COMMITTEE FOR CHANNEL 3

The Governor's committee for channel 3 herewith submits its comments in opposition to the proposal to delete channel 3 from its existing use at Hartford, Conn., which proposal was contained in the Commission's notice for proposed rulemaking in docket 14241. The proopsal to change the present and subsisting allocation of channel 3 is particularly adverse to the interests of all of the people of the State of Connecticut, is contrary to the Communications Act of 1934, to court decisions and to the Commission's own decisions interpreting that statute, and to the interests of the public at large. The Governor's committee is strongly opposed to the adoption of the Commission's proposal for the reasons which are set forth herein. Its comments are as follows:

1. The Governor's committee for channel 3 is a group of 170 residents of Connecticut representing widely diversified activities and all geographical areas of

the State. Among those included on the committee are the following individuals:

Governmental:

The Governor and Lieutenant Governor of Connecticut.
The entire Connecticut congressional delegation, namely the two U.S. Senators and six Congressmen.
A former U.S. Congresswoman from Connecticut.
The speaker of the house, Connecticut General Assembly.
The majority and minority leaders of the State senate and house of representatives; Connecticut General Assembly.
The mayors of Hartford, New London, Putnam, Rockville, Torrington, Waterbury, Willimantic, and Winsted, Conn.
Town manager of Danielson, council president of Norwich, town clerk and registrar of voters associations of Connecticut, town clerk of Scotland and first selectman of Westbrook, Conn.
Chairman, Connecticut Development Commission.
President, State Police Chiefs Association.

Educators:

Commissioner of Education, State of Connecticut
President, University of Connecticut
Chairman, board of trustees, University of Connecticut
Dean, school of business administration, University of Connecticut
Executive director, Connecticut Educational Association
Superintendent of schools, Watertown
Superintendent, U.S. Coast Guard Academy
Headmasters of Gunnery School, Hotchkiss School, Kent School and Pomfret School

Agricultural:

President, Connecticut Farm Bureau Federation
Master, Connecticut State Grange
Connecticut Wholesale Milk Producers Association
Connecticut Milk for Health.
President, Future Farmers of America
President, Windham County Fair Association

Labor:

President, State AFL–CIO Council
Business agent, International Association of Machinists

Religious:

Archbishop of Hartford
President, Connecticut Council of Churches
Rabbis of synagogues at Hartford and West Hartford

Civic Organizations:

President, Connecticut Chamber of Commerce
Executive director, Connecticut Petroleum Council
Representative of League of Women Voters of Connecticut
President, Manufacturers Association of Connecticut
Executive vice president, Naugatuck Valley Industrial Council, Inc.
Chairman, Quinebaugh Valley Action Committee

Media:

Editor, Ansonia Sentinel
Managing editor, Branford Review
Editor, Clinton Record
President, Connecticut Editorial Association
Publisher, Deep River New Era
Editor, The Middletown Press
Publisher, Naugatuck News
Publisher, Norwich Bulletin
Representative of Stafford Press
Editor, Thomaston Express
Managing editor, Torrington Register
Publisher, Waterbury-American
Editor, Windham County Transcript
President, WBIS, Bristol
President, WILI and WINI, Willimantic

Military organizations:
Department Commander, American Legion, Department of Connecticut
Department Commander, Veterans of Foreign Wars, Department of Connecticut
Legislative chairmen, Tuttle Burns unit, American Legion Auxiliary, Riverton
Business: Executive of many of the leading industrial and commercial establishments in Connecticut.

2. A list of the full membership of the Governor's Committee for channel 3, together with their addresses, and civic, governmental or business activities, is set forth in appendix A attached hereto.

3. The Governor's Committee for channel 3 came into existence as a result of invitations to become members thereof which were extended by Governor Dempsey of Connecticut shortly after the release of the Commission's Notice of Proposed Rulemaking on August 3, 1961. Governor Dempsey invited leaders of governmental, educational, agricultural, labor, business, military, religious, newspaper, and civic organizations representing all geographical areas of the State of Connecticut to serve on the committee. The response was an overwhelming endorsement of the purpose of the committee, namely, to preserve channel 3 in the present use at Hartford.

4. On August 15, 1961, pursuant to a request for a meeting by Governor Dempsey, the entire Connecticut delegation in the U.S. Congress met in Washington, D.C., for the purpose of discussing the Commission's Notice of Rulemaking relating to channel 3 at Hartford. Present at this meeting, in addition to the Connecticut congressional delegation were Governor Dempsey, his aid from Connecticut and two representatives of WTIC–TV. Each member of the Connecticut congressional delegation, or his representative, expressed his opposition to the Commission's proposal relating to channel 3 at Hartford and agreed to serve on the Governor's Committee for channel 3. There was a discussion of the possible introduction of legislation in the Congress which would prohibit any change in the status of channel 3 at Hartford. Furthermore, the members of the Connecticut congressional delegation decided that each would file formal comments in docket 14241 objecting most strongly to the Commission's proposal affecting channel 3.

5. On September 18, 1961, a meeting of the Governor's committee was held, at the call of Governor Dempsey, in the hall of the House, State Capitol, Hartford, Conn., at 8 p.m. Although many of the members of the committee came from distant parts of the State, the number of members attending this meeting was 146 out of a membership at that time of 156. In addition to the membership, many members of the public interested in the work of the committee were present.

6. The committee unanimously adopted a resolution stating that "the implementation of the (Commission's) proposal would be seriously prejudicial and greatly injurious to a vast number of Connecticut residents who rely on WTIC–TV on channel 3 for their only clear television service and to an additional very large number of Connecticut citizens who rely on the same station for their ability to receive a choice of television signals" and authorizing the filing of comments on behalf of the Governor's committee urging the Commission not to make the allocation change proposed in docket 14241. A copy of this resolution is as follows:

"Whereas the Federal Communications Commission issued on August 3, 1961, in docket 14241 a notice of proposed rulemaking inviting comments from interested persons on a proposal to delete channel 3 from its present use at Hartford, Conn., and to substitute therefor a UHF frequency; and

"Whereas the implementation of the proposal would be seriously prejudicial and greatly injurious to a vast number of Connecticut residents who rely on channel 3 for their only clear television service and to an additional very large number of Connecticut citizens who rely on the same station for their ability to receive a choice of television signals; and

"Whereas channel 3 has substantially greater ability to render a clear television signal over wide areas in the hilly and wooded regions of New England than does a UHF frequency; and

"Whereas WTIC–TV has utilized channel 3 to render an excellent television service in the fields of education, religion, news, weather forecasting, agriculture, government, civic affairs, and entertainment of particular need and interest to residents and organizations of Connecticut; and

"Whereas channel 3 is the only VHF channel allocated to Hartford, the capital of Connecticut and the center of governmental, business, and civil life; and

"Whereas the deletion of channel 3 from its present use at Hartford would be inequitable, unjust, and discriminatory to hundreds of thousands of Connecticut residents: Now, therefore, be it

"*Resolved*, That the Honorable John N. Dempsey, Governor of the State of Connecticut is directed to file comments on behalf of the Governor's committee for channel 3 with the Federal Communications Commission urging the Commission not to make the allocation change proposed in docket 14241, to make this resolution a part of such comments, and to take whatever steps are appropriate and fitting to oppose the aforesaid proposal, including participation in oral argument before the Commission, if such is held.

"This is to certify that the foregoing resolution was unanimously approved by the Governor's committee for channel 3 at a duly called meeting held on September 18, 1961, in the Capitol Building in Hartford, Conn."

7. In implementation of the resolution, it was agreed that members of the committee not only would write personal letters to the Commission proposing the channel change at Hartford but also would urge residents of Connecticut who would be adversely affected by the change to do likewise. Further, members of the committee determined that the public interest of television viewers in the State of Connecticut best could be served by suggesting that resolutions in opposition to the Commission's proposal be adopted by statewide and local organizations and also by cities or towns in Connecticut which would be adversely affected, and to recommend that such resolutions be filed with the Commission in docket 14241.

8. In addition, the committee unanimously approved the appointment of an executive committee composed of 11 members with Governor Dempsey as chairman. The filing of the instant comments has been formally approved by the executive committee.

9. The committee has found an overwhelming opposition throughout the entire State to the proposal to change the present status of channel 3 at Hartford, which channel for approximately 4½ years has been providing the only service to thousands of Connecticut viewers. Resolutions or formal comments opposing the Commission's proposal have been filed with the Commission by 263 cities, towns, and civic and other organizations in Connecticut. We understand that additional resolutions are in process of preparation for submission to the Commission. Without exception, these resolutions or comments, primarily from towns and organizations in the hilly and wooded areas of western and eastern Connecticut (as well as from adjacent States) strongly attest their great dependence on channel 3.

10. The outpouring of letters and petitions from individuals in Connecticut and neighboring States opposing the change in the status of channel 3 has been exceedingly heavy. We are advised that the Commission has received letters of opposition from the residents of over 10,000 television homes, representing over 36,500 persons, voicing their vigorous protests to the proposed deletion of channel 3 from its present operation. These persons are located not only in Connecticut, but also in the States of Massachusetts, New York, and Vermont. The great majority of these objections come from persons residing within the areas where they would lose their only clear television service or be confined to the reception of but one clear television service if the suggested change in the status of channel 3 were adopted.

11. The Governor's committee most strenuously urges the Commission not to make the channel change proposed. To do so would be fundamentally unfair and inequitable to the interests of many thousands of citizens in the area presently served by WTIC–TV on channel 3. Field strength measurements already filed with the Commission prove that in excess of 277,000 people, of whom about 260,000 reside in Connecticut, would be unable to obtain any clear television service if the proposed change in the status of channel 3 were effectuated. These same measurements also demonstrate that an additional 205,911 persons, of whom approximately 145,000 live in Connecticut, would be restricted to the reception of but one clear television service if the docket 14241 recommendation were promulgated. The validity and reliability of these field strength measurements were confirmed by simultaneously conducted interviews in the homes of listeners.

12. Further confirmation of the disastrous impact on television viewing in the area resulting from the docket 14241 proposal is forcefully presented by the thou-

sands of objections from viewers which have been received by the Commission. The writers of these letters, living predominantly in the hilly and wooded sections, speak from actual personal experience of their inability to receive clear television programs from UHF stations in the area, and they express the necessity of retaining the existing use of channel 3 in order to enable them to obtain in a great many instances their sole clear reception of television programs or, in a large number of other cases, a choice of programs.

13. It is of vital importance that a commercial television channel be available which will produce a clear television picture in the homes of all, or substantially all, of the citizens of our State. Television provides a superb vehicle for the dissemination of news concerning the activities of governmental agencies and civic institutions to Connecticut residents. Channel 3 has been of the utmost importance in explaining the civil defense program and the advisability of adopting an adequate fallout shelter plan. In time of emergencies, such as floods, hurricanes, etc., the use of television is of critical significance. Hartford is the capital and heart of Connecticut. From this city originates news of statewide and regional activities which is of essential concern to all of our citizens. Channel 3 is the only television vehicle which can accomplish this result. The members of this committee know from their own personal experiences that the signals of the UHF stations are unable to penetrate the large areas consisting of hilly and rough ground where many thousands of our citizens reside. The only way to obtain a clear television signal in these regions is through the utilization of channel 3.

14. Furthermore, the State of Connecticut is legally and equitably entitled to retain channel 3 on its existing basis at Hartford. The Communications Act was enacted into law for the purpose of making radio facilities, and presumably television, available "so far as possible to all the people of the United States", and further the Communications Act requires the Commission to make "a fair, efficient, and equitable distribution" of television service "among the several States and communities." This language has been interpreted by the courts and the Commission to mean that viewers are entitled to their first or second program service before other viewers in different areas and States are granted their third or fourth service. We cannot understand at all the assumptions behind the proposal which would award Providence its fourth VHF facility (it already has the equivalent of three VHF channels) at the expense of Connecticut which would be left with but one VHF channel. There is no justifiable reason why our citizens should have their television service destroyed or disrupted when Providence's needs have already been amply fulfilled by allocating three VHF channels to its area.

15. We are familiar with the fact that the title of the present case is "*In the Matter of the Deintermixture of Hartford, Conn.*" The removal of channel 3 from its present status would not even achieve deintermixture in the area because the existing New Haven station on channel 8 would continue to render service to a substantial portion of Connecticut. Thus the objective of the Commission could not possibly be realized if the channel 3 proposal were implemented.

16. The members of this committee are personally familiar with the excellent character of WTIC–TV's programing. We know that the licensee of WTIC–TV has rendered a program service peculiarly meeting the needs of Connecticut's citizens. From channel 3 we obtain essential news of the activities of civic, governmental, educational, charitable, agricultural, and religious organizations in our State. Although in limited portions of the eastern and western areas of the State, the signals of television stations in Providence, Boston, Schenectady, and New York City are present, they do not provide a program service designed to meet the needs of Connecticut's institutions or interests. But WTIC–TV on channel 3 provides a program service geared to the particular needs of Connecticut's citizens. It furnishes detailed weather reports, including news of flood, hurricane, and snow conditions, oriented to the climatic situations prevailing in Connecticut; it broadcasts the results, not only of national, but also of local and State elections; it provides a television platform for the airing of views of Connecticut candidates for local, statewide, and national office; it telecasts news items about events originating in Connecticut's numerous cities, counties, and towns, including news of community and civic activities; it brings to Connecticut viewers regular reports on legislation pending before the Connecticut Legislature; it telecasts reports from the Connecticut congressional delegation in Washington on a regular basis. In addition, WTIC–TV has a

schedule of programs emphasizing matters of local interest to Connecticut, such as:

"Connecticut—What's Ahead," a discussion program with prominent Connecticut citizens interpreting those issues most important to the State.

"RFD 3," an agricultural program oriented especially to Connecticut's farm problems.

"Your Community," a program which presents subjects of local and State interest, with participants not only from Hartford, but from towns and communities throughout the State.

"Perception," a local educational program dealing with subjects with a local slant, conducted in cooperation with the Unievrsity of Hartford.

Only by retaining channel 3 in its present status at Hartford can all of our citizens obtain a television service which will meet the needs of Connecticut viewers.

17. WTIC–TV has a magnificent record of cooperation with our own State and local organizations which goes far beyond the call of duty. They have the technical know-how, the physical facilities, the personnel, and above all the desire to provide a television service of unique interest to us.

18. The Governor's committeee strongly opposes the Commission's suggestion in docket 14241 that channel 3 be reserved for noncommercial educational use at Hartford or elsewhere in Connecticut. The Commission has already reserved three UHF channels for educational use in Connecticut, at Hartford, Bridgeport, and Norwich. Plans have already been completed and are in full swing for the erection and activation of noncommercial educational stations on these UHF channels with the expectation that the first of the stations will be on the air in the spring of 1962. The last session of the Connecticut Legislature appropriated $200,000 for this purpose, and substantial additional sums have been, and are being, acquired by the educational organization responsible for this work.

19. In conclusion, the Governor's committee for channel 3 is filing these comments with the fervent request that the present status of channel 3 be left as it is. We firmly believe that every consideration, whether of law as set forth in the Communications Act and in court decisions, or of equity and fairplay to the citizens of our State, demand the retention of channel 3 in its present position. We earnestly request that the rulemaking proceedings in docket 14241 be terminated at the earliest possible time by a decision which will not cause utter confusion and disaster to the pepole of Connecticut. We urge you in all fairness to allow us to continue to receive our present service from channel 3 at Hartford.

Respectfully submitted.

THE GOVERNOR'S COMMITTEE FOR CHANNEL THREE
(By order of the executive committee).
By JOHN DEMPSEY,
Governor of Connecticut, Chairman of the Committee.

FEBRUARY 14, 1962.

The CHAIRMAN. Senator, let me thank you on behalf of the committee for your appearance and your statement here. Certainly the committee will give consideration to the statement that you have made. There are involved some very important policy matters in connection with this whole thing. The matter of deintermixture and the utilization of the VHF channels is something we have had for a long time, for several years. We have been trying to do something about the better use of the entire spectrum.

I would like to call to the attention of those present, including our colleagues, the policies that we are going to have to decide.

There are two questions here. I would doubt very seriously the appropriateness of our tying the two together in the same legislation, since one of them deals with an economic problem, where the public is involved, and that has to do with the purchasing of television sets in the future. The cost of that is going to be borne by the general public. A long period of time will be required to effectuate the long-range program. Then the other part of the program involves

deintermixture, which seems to me should be considered as a separate proposal, due to the fact that there are proceedings underway before the Communications Commission at the present time.

We know that in the *Sangamon Valley* case, which is of great interest to the State of Illinois, the Supreme Court had something to say about ex parte matters in connection with rulemaking procedures on the record. I do feel, however, there is a solution to this problem. We can all, if we work together, reach it. I believe we can do so under appropriate procedures.

Does anyone have any questions?

Mr. MACK. Mr. Chairman—Senator, is this the only VHF station in Connecticut?

Senator BUSH. No, there are two.

Mr. MACK. There has been no proposal at the present time to eliminate the other VHF station?

Senator BUSH. No.

Mr. MACK. Is this station located in Hartford serving principally the entire State of Connecticut?

Senator BUSH. No.

Mr. MACK. The majority of the State?

Senator BUSH. I would say that it serves probably half of the State geographically, east and west. But it might be a little more than that—actually. The other channel, channel 8, also serves about half of the State, or a little more. There is a little overlap there, I am sure. In other words, you can get channel 8 in Hartford; you can get channel 3 south of Hartford, in New Haven, where the other one is. But I think that as to the coverage in population, in viewers, and so forth, that you will get more expert testimony than I am able to give. I am not prepared to give detailed testimony in connection with that matter. But this will be given to the committee in the course of the hearings.

Mr. MACK. It is quite important to have first-class television in your capital city though.

Senator BUSH. Well, it certainly is.

Mr. MACK. For the purpose of covering the State legislature and activities of your State government.

Senator BUSH. Well, not only that, but it is an educational center, it is really the center of social and political and economic life of the State. It is of vital importance. But the thing that impresses me most about this is that these people have been doing this job up here for a long time. It is almost inconceivable to me that it should be taken away and placed in another State which already has adequate facilities in this field.

Mr. MACK. That is a very important statement that you just made.

Senator BUSH. Yes.

Mr. MACK. The test seems to be not that the new channel, first-class television, is needed elsewhere; the tests seem to be that they want to remove it from where it is now operating. This is something revolutionary, inasmuch as throughout the history of regulation of the radio frequencies, they have always placed the test on where the frequency was needed. But in this case, they are arbitrarily selecting communities to discriminate against, to remove the television channel from that area.

Senator BUSH. Well, it would have very disastrous results to the people of our State. I have forgotten the figure—there would be 175,000, I think it is, that would be left without any television viewing if this thing was taken away. This would take a long time to correct that situation, and a great deal of expense to the people who own television sets. I do not think that it is necessary to do it or desirable that this great vacuum be left there.

Mr. MACK. Thank you very much, Senator. In case there was any doubt in your mind, I find myself in general agreement with your views.

Senator BUSH. I thank the gentleman, and I rather sensed that.

The CHAIRMAN. Any further questions by members of the committee?

Senator, thank you very much. We know you have a busy schedule.

Senator BUSH. Thank you, Mr. Chairman, and members of the committee.

The CHAIRMAN. Next we have our colleague, Mr. John Monagan.

STATEMENT OF HON. JOHN S. MONAGAN, A REPRESENTATIVE IN CONGRESS FROM THE FIFTH CONGRESSIONAL DISTRICT OF THE STATE OF CONNECTICUT

Mr. MONAGAN. Mr. Chairman, members of the commitee, I want to thank you for this opportunity to testify before you and to make known my views on H.R. 8031 and the other bills that have been referred to here this morning.

I consider that this legislation is of vital importance to thousands of Connecticut residents, including many in the Fifth Congressional District, which I have the honor to represent. That is roughly the northwestern and western sector of Connecticut.

At the outset I wish to state that I am wholeheartedly in accord with the principle of all-channel television legislation, such as H.R. 8031.

This bill would delegate power to the Federal Communications Commission to require that all television sets shipped in interstate and foreign commerce be capable of receiving all 82 television channels, including the 12 MHF channels and 70 UHF channels.

I support this bill with strong reservations, however, and I want at this time to make known the reasons for these reservations. Simultaneously, I wish to ask the committee to give favorable consideration to the enactment of H.R. 9256, H.R. 9291, and several identical bills which would serve the purpose of H.R. 8031, but would also prohibit the Federal Communications Commission from its stated purpose of deleting the VHF from Hartford, Conn.

I cannot support H.R. 8031 in its present form because, while purportedly serving the interests of all future television receiver owners, it would surely afford the FCC with a weapon to deprive 44,814 residents of my district of any TV reception and reduce the reception of 104,004 others to one channel and no selective choice of channels.

This legislation would have the effect of requiring that television receivers sold in my district be equipped to receive all channels; but if it were adopted without the FCC restrainers contained in H.R. 9267, we could find ourselves in the position of having no channels operating in the reception area of 44,814 residents. Their fine equipment would

be useless, like an expensive boat on a dried-up lake. I would favor H.R. 8031 without reservation if it were amended to include a prohibition against the deletion of VHF channel 3 from Hartford.

I am aware that H.R. 8031 has the sponsorship of the Federal Communications Commission. The FCC is also sponsoring the proposal for the deintermixture of Hartford, Conn., which would result in the deletion of channel 3 VHF from the capital city of my State. I have already communicated to the FCC my objections to this deintermixture, and with your permission I will leave with you a copy of my statement addressed to the FCC on January 26, 1962.

I ask that it be made a part of the record.

The CHAIRMAN. Very well, we will be glad to receive that for the record.

(The statement of Mr. Monagan referred to follows:)

STATEMENT FROM REPRESENTATIVE JOHN S. MONAGAN TO THE FEDERAL COMMUNICATIONS COMMISSION, RE DOCKET NO. 14241. IN THE MATTER OF DEINTERMIXTURE OF HARTFORD, CONN.

The proposal of the Federal Communications Commission in delete channel 3 from its present use in Hartford, Conn., would deprive Connecticut residents, especially those in rural and suburban areas, of television service to which they are both accustomed and entitled.

As a Member of Congress and as a frequent television viewer, and also as a regular participant in television presentations, I hereby make objection to this proposal, and recommend that the Hartford deintermixture proposal be withdrawn. It would not be in the public interest.

This experiment, and it is apparent from the divided expressions of opinion voiced by members of the FCC that it is only an experiment, to determine whether multiple UHF stations can effectively supplant VHF service, would work an immediate hardship on nearly 260,000 people. The elimination of channel 3 from Connecticut would deprive these 260,000 people of the only clear television picture now available to them. An additional 145,000 people would have their choice of television programing reduced by 50 percent and be confined to a single outlet. Connecticut residents should not be compelled to accept the imposition of this blackout in the name of experimentation.

It has been well stated by FCC Commissioner John S. Cross, who opposed the Hartford deintermixture, that "it cannot be successfully argued that major population centers are entitled to a full complement of programs from all three networks when this end can be achieved only by depriving large numbers of people (living outside these metropolitan centers) of all or a substantial part of the service they now receive."

It is certainly to be hoped that no effort will be made to thrust UHF upon a reluctant public in the vain hope that it might fan a spark of life into UHF television, despite the cost in loss of service to the rural population.

The Commission must understand that a substantial segment of the Connecticut population, the residents of all of Litchfield County and a great part of New Haven County, included in the Fifth Congressional District which I represent, would suffer a serious disservice in this proposed departure from the acceptance of the laws of nature.

It has been well established that UHF is neither effective nor desirable television service in sparsely populated areas, and in areas of rough, hilly, and wooded terrain. Consisting largely of such terrain, Connecticut and the Fifth Congressional District must look to VHF stations for television reception.

The Commission has on file statistics showing that the elimination of channel 3 would deprive 44,814 residents of predominately rural and sparsely settled Litchfield County of a clear television picture. It would limit 104,004 residents of Litchfield County and of Naugatuck, Southbury, Middlebury, Waterbury, and Oxford, in New Haven County to single channel reception.

The towns in Litchfield County most seriously affected by the elimination of any receiption, would be Sharon, Salisbury, North Canaan, Norfolk, Colebrook, Winchester, Barkhamsted, New Hartford, Torrington, Goshen, Cornwall, Harwinton, Litchfield, Warren, Kent, New Milford, and Bridgewater.

The elimination of channel 3 would, in these circumstances, set Connecticut communications back immeasurably. It would cut off television communication between the capital of the State of Connecticut and communities which have welcomed and benefited from the wide range of news, entertainment, educational, weather, public service, and religious programing offered by channel 3. I find neither assurance nor guarantee in FCC studies and reports that UHF stations will provide the comparable service now or in the foreseeable future.

It is interesting that strong objection to the deintermixture proposal has been voiced by other news media of Connecticut, including newspapers and radio stations whose editorial protests have been made a part of your file.

I should like to call particular attention to the fact that on a previous occasion, the Commission has held that the prospective loss of service by thousands of viewers required the retention of channel 3 in Hartford. This earlier opinion of the FCC was upheld by the court of appeals in Washington as "not only rational but reasonable." The Supreme Court of the United States sustained this decision. This position should not be reversed.

As a Member of Congress, I have received communications from governing bodies and officials of many cities and organizations in the form of resolutions opposing the removal of channel 3 from Connecticut, in addition to a large number of letters from individuals.

Following are the sources of the resolutions coming to my attention:

Board of aldermen, city of Waterbury, Conn.
American Legion, Department of Connecticut, executive committee
Town meeting, town of Middlebury, Conn.
Junior membership, Connecticut State Federation of Women's Clubs
President's council, Connecticut State Federation of Women's Clubs
Connecticut Chiefs of Police Association
Board of councilmen, city of Torrington, Conn.
Board of directors, Manufacturers Association of Connecticut
Salisbury, Conn., town meeting
Connecticut State Grange
Board of directors, Naugatuck Chamber of Commerce, Naugatuck, Conn.
Board of directors, chamber of commerce, State of Connecticut

In each case the resolution praised the service currently provided to TV viewers in Connecticut and objected to the proposal to eliminate channel 3.

I urgently recommend to the Commission that it recognize the wisdom of its previous ruling; that it consider the requests of Connecticut residents, communities, and organizations, and that it permit channel 3 to continue and enlarge upon its commendable VHF service to Connecticut viewers.

In accordance with the provisions of section 1.54 of the Commission rules, 14 copies of this submission are field herewith.

Mr. MONAGAN. The people of Connecticut have a vital interest in the retention of channel 3 at Hartford, and they have made known their feelings through letters and resolutions which have been received in my office in large numbers. Their interest has also resulted in the formation of the Governor's committee to which Senator Bush has already referred. I have been privileged to be invited by Gov. John Dempsey to serve as a member of that committee, and I have been happy to do so.

I have been informed that over a quarter of a million residents of my State of Connecticut will be adversely affected if channel 3 is taken from Connecticut. It should be emphasized that past decisions of the FCC and the Supreme Court have held that public interest required the continued assignment of channel 3 to Hartford, Conn.

I wonder how many of the 250,000 Connecticut residents who will be injured by this deintermixture action are fully aware of the seriousness of the threat it poses to their news, entertainment, and public service programs, with or without the enactment of H.R. 8031.

I want it clearly understood by this committee, by the FCC, and by the residents of my State and of my district that I support the expanded and enlarged use of UHF television channels where practical. It is possible that the development of more UHF channels will ultimately provide greater opportunity for television, as a public service and as a business enterprise. But I see no reason why the experiment with UHF must be at the expense of existing VHF channels and to the detriment and discomfort of present audiences. If there is to be an experiment with UHF, let it be in concentrated metropolitan areas where none will be left without reception.

It has been established that UHF is not effective in sparsely populated areas, and in areas of rough, hilly, and wooded terrain. Thus, it can be stated that UHF would not measure up to the standards of VHF presentation now enjoyed in Connecticut, whose rural and suburban areas are hilly and wooded.

I ask this committee to give the FCC the authority it seeks to require that all television receivers be fully equipped for VHF and UHF reception. I also ask this committee to protect the interests of 250,000 television receiver owners in Connecticut, by amending this measure to prohibit the deletion of WTIC channel 3 from Hartford, Conn. I ask this most specifically in the names of nearly 45,000 residents of the Fifth Congressional District who are faced with a complete television blackout if this FCC experiment with UHF is permitted in spite of congressional and public objection.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Mr. Monagan. We are glad to have your statement. Speaking as one member of the committee, I am hopeful that we can work out some satisfactory approach to the problem that is being pointed up here.

Mr. MONAGAN. I understand, Mr. Chairman, that it may not be in quite the form I have suggested, but I appreciate your assurance.

The CHAIRMAN. Thank you very much. Are there any questions by any members of the committee? Thank you.

At this time we are glad to hear from our colleague, the Honorable Horace Seely-Brown, Jr.

STATEMENT OF HON. HORACE SEELY-BROWN, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CONNECTICUT

Mr. SEELY-BROWN. Thank you very much, Mr. Chairman. I am grateful to you, Mr. Chairman, and to your colleagues on this committee for granting me at this time the opportunity to appear before you at the opening of hearings upon several bills and resolutions which deal with the regulatory functions of the Federal Communications Commission in regard to television.

About a month ago, as the Representative in Congress of the 411,919 residents of the Second Congressional District of Connecticut, which is comprised of the four eastern counties of my State, and which totals approximately 42 percent of the area of the State, I considered it to be my duty to file a comment with the Federal Communications Commission on its Docket 14241, a proposal to delete television channel 3 (VHF) from Hartford, Conn., and to reallocate the channel to Providence, R.I., or to reserve it for educational television.

It is my understanding that the Commission has filed similar proposals in seven other areas of the country. It appears that the close attention which many Members of Congress are giving to the legislative proposals which are before this committee now result, in part at least, from a strong feeling that the Commission's deintermixture policy which it is seeking to implement is about to be carried out with recklessness. Legislation is needed to guide and to restrict the Commission so that the enjoyment and the usefulness of television in this country may be expanded and strengthened, and not crippled.

Relating the pending legislation which this committee now is considering to the situation in Connecticut, the proposed deletion of channel 3 from Hartford would result in no clear television service at all for 260,000 Connecticut residents, of whom 211,188 live in my district. More than half as many would be able to receive service from only one television station.

Considering the large population of Connecticut, and the State's density of population, fourth highest in the United States, such a condition would be intolerable.

Although I understand the technical reasons advanced in explanation of or in justification of the Commission's deintermixture proceedings, I have studied the record and have observed the situation in Connecticut. I was impelled to comment to the Federal Communications Commission that the more the situation is studied, the more the action of the Commission, as applied to channel 3 in Hartford, bears a shocking resemblance to harassment, not so importantly of one licensee, but of most of the population of Connecticut.

For 10 years, since the Commission first allocated channel 3 to Hartford in April 1952, there have been proceedings before the Commission, aggregating two dozen or more acts either by the Commission or by petitioners or appellants. Six times the Commission itself denied requests to delete channel 3 from Hartford. The matter has been in the courts, going even up to the Supreme Court, with the retention of channel 3 in Hartford everywhere upheld. Yet, the Commission now proposes to repudiate its own action six times confirmed.

I refer to these administrative and regulatory proceedings in the detail which I have, because such proceedings and the legislation which causes or permits them to be taken, are of importance, I believe, in your consideration of the pending bills and resolutions.

I would like to say that I am in favor of the bill H.R. 8031 which the chairman introduced at the request of the Federal Communications Commision, provided it is strengthened to protect the rights of the people in my State, and in other States, to be served by the same very high frequency channels by which they are being served now.

I noted that during the hearing on a similar bill before the Senate Committee, Senator Dirksen referred to the need for freezing very high frequency allocations in their existing areas if the Commission is to be authorized to prescribe "minimum performance standards" for television receiving sets, as a kind of "grandfather clause." This is a familiar device in much legislation which has been adopted by the Congress and by the legislatures of the various States.

Its purpose is to protect the rights of those already on the ground when a drastic change is introduced.

While I certainly would accept the chairman's bill, with the modifications which I have suggested, I believe that H.R. 9267, intro-

duced by a member of this committee, Mr. Roberts of Alabama, satisfactorily meets the real needs of the present situation in its present form. Several other identical bills, H.R. 9277, H.R. 9322, H.R. 9292, and H.R. 9291, would, of course, be equally satisfactory.

The "minimum performance standards" which some of these bills would authorize the Commission to establish should be limited, it seems to me, to requiring television receiving sets to be capable of receiving signals on all frequencies. There is no justification for attempting to regulate or to require color, or the size of the tubes, or any of the other specifications that ought to be a matter of competition and resourcefulness among the manufacture of the receiving sets.

These minimum performance standards, of course, as provided in these bills, could apply only to the television receiving sets which are produced after the standards are placed in effect.

The 54 million homes, or more, which now have television, will have to get along with what they have now, until their present receiving sets wear out or are discarded for being obsolete. All of these sets are equipped to receive very high frequency signals. Only a relative few have the extra equipment which is needed to receive ultra high frequency signals.

Those who have television today have the equipment which best suits their circumstances, including cost, maintenance, satisfactory reception, and proximity of telecasting stations.

These people are entitled to be protected in the service which they enjoy now. It is a right which they have, and there might well be serious legal difficulty in the way of either legislative or administrative action which would result in depriving them of that right.

Therefore, let us have both VHF and UHF with the new sets. In the meantime, let us tell the Federal Communications Commission to kep all of the channels on very high frequency as they are now, in the interest of all of the people and in the use of the television equipment which they now have.

Thank you very much, Mr. Chairman, for permitting me to appear before your committee.

The CHAIRMAN. Thank you very much. We are glad to have your statement.

Any questions?

Thank you.

Do we have any other of our colleagues from Connecticut?

We are glad to welcome at this time our colleague, the distinguished minority whip, the Honorable Leslie C. Arends.

Mr. SPRINGER. Mr. Chairman, may I ask unanimous consent to insert a statement at this point in the record?

The CHAIRMAN. Without objection, it will be included at this point in the record.

(The prepared statement of William L. Springer is as follows:)

STATEMENT OF HON. WILLIAM L. SPRINGER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. Chairman and members of the committee, I am William L. Springer, a Member of the House of Representatives for the 22d District of Illinois, and a member of this committee, as you know.

I am in accord with the basic principle of legislation that would delegate to the Federal Communications Commission the power to require that all television sets shipped in interstate or foreign commerce be able to receive all frequencies allocated to television broadcasting, including both the 12 very high frequency channels and the 70 ultra high frequency channels.

However, such legislation should clearly prevent the FCC from using that power to substitute UHF for VHF channels, either nationwide or in selected areas.

An example of such Commission action, and of the unfortunate effects which it would inevitably produce, comes from my own district. At present the people of my area are well served, not only by WCIA, a VHF station broadcasting on channel 3 out of Champaign-Urbana, my home town, but also by UHF stations. The FCC is now actively considering a proposal to destroy channel 3 and substitute for it a new UHF channel. To the people of my area the consequences would be catastrophic. VHF stations have significantly greater coverage than UHF stations. The people served by WCIA—predominantly rural and small-town people—now depend on the wide-area WCIA signal for State, regional, and local news, for weather and crop reports, for civil defense information, and for many other important programs of special interest to them.

This disruptive proposal is part of the Commission's so-called deintermixture campaign, the end result of which would be to abolish completely VHF television service in this country. Such a root-and-branch destruction would have fearful consequences nationwide. Vast portions of this country would be wholly without any grade B or better television service.

There is reason to fear that enactment of the Commission's bill, H.R. 8031, would encourage such a policy. All-channel receiver legislation would pave the way either for deintermixture of selected markets, or for total abandonment of VHF. If our television system is to do all it is able to do, UHF and VHF must grow side by side. Central Illinois is an excellent example of how well this side-by-side development works in practice.

I support, therefore, such bills as H.R. 9267, commonly called the Roberts bill, and companion bills before the committee. These make it clear that the Commission shall not have the power to mutilate our television service by moving television stations from the VHF to the UHF. At the same time, they facilitate proper development of UHF service together with, and not to the exclusion of, VHF service. Thank you.

STATEMENT OF HON. LESLIE C. ARENDS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. ARENDS. Mr. Chairman, I have often heard the definition of an expert as a fellow who is a long ways from home. Being so close to my colleagues, and working with you each and every day, I feel I am in good hands not qualifying as an expert.

Mr. Chairman, members of the committee, I appreciate your granting me the privilege of appearing before your committee. My imposing on this busy committee in this way itself bespeaks the earnestness of my views on the bill, H.R. 8031, you presently have under consideration. It bespeaks, if you will, the extraordinary importance of this proposed legislation to the people of my district and to many other congressional districts that are predominantly rural in character.

There is considerably more involved here than might at first blush appear from the few sentences of less than two pages that constitute this bill. It is important that your committee recognize as I am sure you do, that inherent in this relatively simple measure there are some fundamental questions of policy that must be resolved. There is more involved in this proposal than the seemingly innocuous question as to what type of television set the people must have to enjoy this great medium.

Our decision with respect to this bill may well determine, indirectly but nonetheless markedly, whether some of our people will be able to have television at all, regardless of the type of set they may purchase. That is what concerns me. It deeply concerns the people of my district. And that is primarily why I have asked for this opportunity to meet with your committee. In whatever action you take on this pending bill I urge your committee to guard against this fateful potential by an appropriate amendment.

If your committee should decide to report this pending bill I most respectfully urge that it be amended to include a provision prohibiting the forced transfer, as now contemplated by the Commission, of existing VHF stations to UHF. If, on the other hand, your committee should decide not to report this measure, I earnestly believe that the committee should give consideration to legislation that will express in law the policy of Congress on this matter of deintermixture which completely disrupts existing operations and takes television away from so many of our people. While we may approve all-channel legislation, we do not approve shifting any VHF station to UHF. Such shifting is not necessary to accomplish the objective, which is to make the maximum utilization of all channels that as many people as possible in all areas of the country have the best possible television made available to them.

Our overall objective, Mr. Chairman, is to make possible the full utilization of the television spectrum in the public interests. I sympathetically appreciate the extremely difficult problem this presents to the Federal Communications Commission in the assignment of channels. They are confronted with the VHF band being more or less fully utilized but very little use made of the many channels available in the UHF band.

It is like the age-old question: Which came first, the chicken or the egg? Few are interested in the large capital investment involved in the erection and operation of a UHF television station because few people have television sets to receive UHF broadcasts. And few people are willing to purchase UHF receivers because there are few, if any, UHF broadcasts to receive.

The pending bill is designed to relieve this stalemate situation. It proposes to give the FCC the authority to prescribe the minimum performance of television sets. Normally, I am opposed to vesting such authority in any agency of Government. It is contrary to the principles of government to which I subscribe. But I can readily see that we are confronted with a very unique situation and perhaps this is the only practical approach to the dilemma. If by this means we create a market for the UHF broadcasts there will then arise an interest in selling in this market.

But I should like to suggest to the committee that the language vesting this authority in the Commission is much too broad. It is so broad that the Commission could practically write the specifications of the sets to be manufactured. It could practically prescribe by regulation the size and shape, if not by name and model, what television receivers can be sold.

I respectfully suggest to this committee that if you believe the situation warrants the Commission to have the authority to decree the kind of television sets that may be shipped in interstate commerce

that the authority be limited solely to the purpose intended—that the sets hereafter be capable of both VHF and UHF reception.

I do not mean to imply that I think the Commission would abuse the broad authority with which it would be vested by the terms of this bill. But at no time under any circumstances should we legislate on that premise if we are to have a government of law and not of men, laws made by Congress and not solely by regulations.

Mr. Chairman, this bill has another serious defect to which I respectfully direct your attention. This relates to a fundamental policy matter on which the Congress, not the Commission, should here and now make its decision clear and emphatic. Determination of policy is our responsibility. It is the responsibility of the Commission to administer the law in accordance with that policy.

Accordingly, I urge the committee to stipulate in this bill that while we seek to bring about the utilization of the UHF channels it is not—and I emphasize the word "not"—it is not our intention that this be done at the expense of existing VHF channels. It behooves us to stipulate in this bill that it is the policy of Congress that the people of the country shall have available to them these two types of stations, competing with each other in the traditional American fashion.

The importance of this is all too evident in the so-called deintermixture plan the FCC is currently undertaking. Parenthetically, I have yet to find anyone who can give me a precise legal definition of the term "deintermixture." While I may not be able to define this intriguing term, I do know, and all too well—and the people of my district and other rural areas know all too well—what the term means in practical application. It means that they are going to be denied the television service to which they have become accustomed and to which they are entitled.

The people of my district have their television from WCIA, a VHF station on channel 3, out of Champaign, Ill. The station itself is located in the neighboring district, ably represented by Congressman Bill Springer, a distinguished member of your committee. For the past 8 years the people of this area have had the benefit of both national and local programs from this station. It has become a part of their daily lives, not only for network entertainment programs and major news events, such as Colonel Glenn's orbital flight, his appearances before the Congress, and all that followed. The small communities of the area are dependent upon the station for local news coverage, for weather and crop reports.

I suppose television is a part of the daily lives of all of us, wherever we live. But it is not as much a part of the lives of those who live in Washington, or Chicago, or large cities as it is of the people who live on farms or small towns throughout the country. For long periods of time, and particularly during the winter months, television is the major contact with the "outside world," so to speak.

With all other facilities available to the people of Washington for entertainment and education, the people here have four VHF stations serving them. With virtually no such facilities the 400,000 people of my district have 1 VHF station. And so, as I say, this station is a part of their lives, something upon which they are dependent.

Nonetheless, the FCC contemplates in its so-called deintermixture program to force this VHF station to convert to UHF. You might

conclude that they will still get television if they simply convert their receiving sets. That's an understandable conclusion, but it will not prove to be the case. In the first place, it is impossible to get the area coverage on a UHF channel. Engineering studies show that with the utilization of the UHF band for this area, and even though additional UHF stations should come into the area, there will be certain parts where the people will get no television at all. In addition, the limited coverage of one or more UHF serving the area will deny the quality programs to the people that are now possible through the VHF of WCIA.

Illinois is the fourth most populous State but we have only eight commercial VHF television channels assigned to us by the FCC. Our neighbors in Missouri have no less than 17 assigned to them with less than half our population.

I am not complaining that Missouri has twice the number of commercial VHF channels than Illinois. I am complaining that the FCC should even contemplate taking from us two of the existing stations—WCIA, channel 3, in Champaign and WREX, channel 12, in Rockford.

And I can tell you with all the emphasis I can command that the people of my district are complaining, and with justification. I have here a folder of the letters, telegrams, and petitions I have received from individuals and groups in the towns throughout the district. They plead to me to save their precious—and precious it is—television. These are not form letters stimulated by an organized campaign. I have been here long enough to recognize such a campaign and to be able to evaluate it as a measure of public opinion. These letters have a spontaneity to them. They have a tone of earnestness. They express a deep-seated personal concern. And all this is confirmed by the literally hundreds and hundreds of people who have spoken to me personally on this whenever I am privileged to be in the district.

However important this is to my own people and to the State of Illinois, to whom I have an obligation, there is more than their interests and my interests involved in this issue. It is my conviction that there is a question of national policy at stake. It is my opinion that there should be written into this bill a provision which will preclude the FCC from converting an existing VHF television station to a UHF. It is my conviction that we should make it emphatically clear—"loud and clear," as our astronauts would say—that in the administration of the Federal Communications Commission Act, of which this proposed measure will be a part, it is the policy of the Congress that UHF be utilized to the fullest but not at the expense of discontinuing stations now operating in the VHF band.

This is my recommendation respectfully to your committee.

I thank you very kindly, Mr. Chairman, for this opportunity to appear before your group this morning.

The CHAIRMAN. Thank you, Mr. Arends, for your statement.

Any questions?

Mr. SPRINGER. May I ask the distinguished gentleman one question. I did not get this from your statement. Perhaps in listening I missed it.

Approximately how many people in your congressional district would not receive any television if channel 3 in Champaign would be converted to a U?

Mr. ARENDS. Well, it is hard to tell exactly, Mr. Springer, how many would not. But there is a great, great number, thousands upon thousands of them who would not be able to be covered by UHF.

Mr. SPRINGER. It is my understanding—you have this city of Pontiac?

Mr. ARENDS. That is right.

Mr. SPRINGER. It is my understanding, from looking at the engineering, that if you drop this station, there is no way possible for Pontiac to be served under any circumstances.

Mr. ARENDS. That whole area up in Livingston County would be completely blacked out.

Mr. SPRINGER. It could not be served, even by the substitution of the U's, as I understand, due to the peculiar region in which Pontiac is located.

Mr. ARENDS. Your statement is correct. From the engineering studies I have seen, and the plats I have seen, that is absolutely true.

Mr. SPRINGER. In other words, this is just one area that would be dropped completely from any service, U, V, or any other, which could not be served unless you put a V in Peoria—that would be the only substitute you would have.

Mr. ARENDS. That is right.

Mr. ROGERS of Texas. Mr. Arends, why do you think the Federal Communications Commission would want to bring about this diversion or conversion from VHF to UHF?

Mr. ARENDS. Why do I think they would?

Mr. ROGERS of Texas. What would be your opinion as to why?

Mr. ARENDS. Well, I would not know, really. It baffles me to some degree.

These stations—and I think there are eight altogether—would be affected by this. There apparently is some reason back of it that is not quite clear in my mind, as to why they want to do that.

As long as I think there is a willingness on the part, probably of this committee, and most of us, adopt an all-channel program which would give everyone television—I am not quite sure why they want to do this.

Mr. ROGERS of Texas. Thank you, sir.

The CHAIRMAN. Well, I think probably I could shed a little light on it.

I think everybody on this committee would certainly say that one of the most valuable resources that we have in the world is the spectrum. I think you have also heard me say that perhaps one of the most glaring examples of waste of a resource is the present utilization of some parts of the spectrum.

The Federal Communications Commission, in its wisdom, back many years ago, under the authority of law, assigned some very high frequencies and some ultrahigh frequencies to television use.

We have seen, over the years, that the UHF part of the assignment is not being used.

Now, this committee has undertaken, over the past years, to bring about better use of the entire spectrum. We ran into all kinds of con-

troversy with the military as to the utilization of certain parts of it. I still contend that I do not believe even the military knows just how well it uses the portions of the spectrum which it has assigned to it.

I realize that is a pretty broad statement. But nevertheless, in my judgment it is true.

We were unable to get any kind of a program for the better management of the spectrum.

Then we tried to see if we could not get some 12 or 15 additional VHF channels immediately beyond VHF 13 assigned for television. We ran into all kinds of problems and difficulties there. We were unable to do it.

So I think that the Federal Communications Commission, in its effort to try to bring about a better utilization of the part of the spectrum that has been assigned for this purpose, decided on this kind of approach.

Now, I am not passing judgment as to whether or not it is the best. Obviously, it is not the most satisfactory. But I think that it does give us some explanation as to why this problem is before us.

As the gentleman has so well and adequately stated, everyone wants to get the best possible use out of this resource. I believe we have reached a time now that we can bring about a solution of this problem. We have the Federal Communications to deal with, we have the Senate to deal with, and we have the House, of course. But if we can combine our efforts, if we will approach this in the spirit of trying to work something out, I firmly believe we can do it.

Mr. ARENDS. I thank the chairman.

Mr. SCHENCK. Mr. Chairman, I think our colleague has made an excellent statement. I am wondering if you have any information upon the economics of the comparable VHF and UHF stations.

Mr. ARENDS. Not too much, Mr. Schenck. I am not a technician or an engineer—somewhat in a general way I would understand it, but not to be able to give this committee, who are experts in this business, what might be termed a real good reply.

Mr. SCHENCK. It is my understanding, I might say to the gentleman, that UHF channels are rather regarded as rather weak signals. If your area, for example, is blacked out, then you have a situation where the market for television becomes a great deal less.

Mr. ARENDS. That is right.

Mr. SCHENCK. And the operation of either VHF or UHF are expensive operations. So in order to justify economically, you have got to have a sizable market. One of the big difficulties is that UHF just does not have a sizable market.

Mr. ARENDS. And particularly throughout rural areas that is true, yes.

Mr. SCHENCK. Yes. It is my understanding that even tall buildings or even a tree will block out a complete UHF signal. That being the case, then, it may not be economically feasible to have a UHF station, and consequently the operators of the station may find it difficult to finance their own operations.

Mr. ARENDS. That is right.

Mr. SCHENCK. So that if greater use can be made of the stronger VHF stations, it would be a considerable advantage to the public.

The CHAIRMAN. Mr. Dingell.

Mr. DINGELL. Very briefly, we welcome the distinguished minority leader to the committee.

I have several questions I would like to direct to him with regard to basic policy. I am sure the gentleman is familiar with the general statement we constantly hear about the Congress, that as a matter of general practice, when the Congress delegates to these quasi-legislative and quasi-judicial agencies certain functions and powers, that the functions and powers delegated should not be introduced upon by the Congress or should not be interfered with. I was wondering if the gentleman would want to comment upon that general principle as it affects the legislation before us.

Mr. ARENDS. I tried to cover that a little in my prepared statement, to the effect that I thought we should be very careful about any powers we might delegate to the FCC. And I am firm in my belief, as I have been all the time during my service in the Congress, that it is our responsibility to fix a policy up here and let most of the agencies downtown execute it. But I think we must keep to ourselves the function of determining this policy, because I think we reflect the best thinking of the people in the country because of our nearness to them.

Mr. DINGELL. Do you feel that the action of the FCC in regard to this particular matter was in effect erroneous?

Mr. ARENDS. I don't want to be too critical of the FCC in that respect, but I think it is a question of whether you are proceeding in the right manner. You are taking it up here for the consideration of this committee which is well-equipped to handle it, and I am only here to express my opinion as one of the Members of Congress that has a responsibility to my own people.

Mr. DINGELL. Do you feel then, that Congress very clearly maintains a continuing supervisory responsibility with regard to the delegations which are made to these regulatory agencies?

Mr. ARENDS. I would like to see this, that not only the agencies but the others know the intent of Congress. We have this question before us in connection with the Armed Services when we appropriate money up here. This hasn't just happened recently, but it happened in other administrations, Mr. Truman's and Mr. Eisenhower's, and in this administration, that the question comes up as to what is the policy established by the Congress. If we say we won't appropriate so many millions of dollars, is that the responsibility of the Congress, or can they withhold the money in the Department of Defense?

Mr. DINGELL. You feel in situations of this sort that the Congress should exercise its own appropriate judgment and authority in its proper field?

Mr. ARENDS. I do.

Mr. DINGELL. And you feel that that is proper and appropriate here?

Mr. FRIEDEL. Would the gentleman yield?

Mr. DINGELL. Yes.

Mr. FRIEDEL. You referred to the voluminous quantity of communications about this. Do you mean protests or petitions?

Mr. ARENDS. No, I would say the vast majority of these are personal letters. When I go home this is the No. 1 question. You would think we didn't have other problems in Government, because every-

body is talking to me about this one question. That is because this matter will effect their daily lives, and it is paramount.

The CHAIRMAN. Thank you very much, Mr. Arends. We are glad to have your statement.

Mr. ARENDS. Thank you.

The CHAIRMAN. The Honorable George E. Shipley. Mr. Shipley we are glad to have your statement.

STATEMENT OF HON. GEORGE E. SHIPLEY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. SHIPLEY. Thank you very much, Mr. Chairman, for giving me the opportunity of being here this morning. However, I feel I might be in excess here today, because I realize that there are many people testifying on this who have a more detailed knowledge of it than myself, and I realize that we have members from Illinois on the committee who are more thoroughly acquainted with this problem. But I think it points out that Illinois is interested in the problem, or we wouldn't have so many people here who are ready and willing to testify.

If I may, I want to read a brief statement to the committee.

I want to say that I wholeheartedly support the growth of UHF television together with, and alongside of, the VHF service we already have. I therefore support proper all-channel receiver legislation, which would achieve this purpose by authorizing the FCC to require that television receivers be capable of receiving the 70 UHF channels as well as the present 12 VHF channels.

Both the FCC-sponsored bill, H.R. 8031, and bills such as the bill introduced by Congressman Roberts, H.R. 9267, provide for all-channel receivers. But there is a fundamental difference between the two types of bill, a difference which leads me to reject the Commission's bill as potentially against the public interest, and to support such bills as the Roberts bill, which would set out the purpose of granting this power and would preclude its being misused.

The Commission's bill, unlike such bills as the Roberts bill, does not insure the development of UHF television alongside with, and not in substitution for, the VHF channels. It is not entirely clear, in the light of FCC recent action, that the Commission might not use its version of all-channel legislation as a means to implement so-called deintermixture or even nationwide all-UHF policies. This must not be allowed to happen. Bills such as the Roberts bill would make certain it will not happen.

Why must this not be allowed to happen? Because the shorter range of UHF stations means that shifting a VHF station to UHF deprives people in outlying areas of the station's service. The serious injury and widespread consequences resulting from such actions are all too evident in my own area. Last July the FCC instituted a proceeding to "deintermix" eight cities, including Champaign, Ill., and convert their existing VHF stations into UHF stations. In the central Illinois area alone this action would deprive a great number of people of the high-quality service which they have been accustomed to receive from WCIA channel 3, Champaign. Many of these persons, if deprived of the service provided by WCIA channel 3, would lose their only grade B television service.

I have personnally conducted hearings in the counties of Christian, Shelby, Cumberland, and Effingham, Illinois, all of which would be affected by this proposal, to get at first hand the reactions of the people. Ninety-nine percent of those in attendance at these hearings claimed that channel 3 was the only channel they could receive with any dependability. The people in these counties now depend on channel 3, for State, regional, and local news, weather and crop reports, civil defense information, and many other types of necessary programs to keep them informed with respect to important events affecting Illinois and their own local communities and area. If WCIA were changed to UHF and these counties deprived of their current channel 3 service, thousands of families would be without any grade B service, and other thousands of families in these counties would get their only grade B television service from an out-of-State station in Terre Haute, Ind. Clearly, it would not be in the public interest to deprive these people of their only television service oriented toward their own Illinois needs. Moreover, it is totally unrealistic to assume that the small communities and rural districts of my area could financially support their own television stations.

I would like to inject here that we have in my part of the State now what we call a depressed area, and the economic situation is very poor at this time.

As the elected Representative of people in counties which would be harmed by the Commission's proposal, I, like the people of those counties, am deeply troubled by, and am firmly opposed to, the Commission's proposed action. And I am deeply concerned lest the power which the Commission seeks might be used to further and expand this policy across the Nation.

I want to stress that I am in accord with the policy of enhancing the growth of UHF television, and that I therefore support appropriate all-channel receiver legislation. But it is unnecessary and wholly undesirable to sacrifice the invaluable VHF channels, thereby disrupting television service to thousands of persons, to achieve further expansion of UHF. The successful operation of UHF stations in the same areas as VHF is not only a possibility, but it is actually a fact—as is adequately demonstrated by the situation in central Illinois today.

In order to make certain that the people of my area, the people of Illinois and the people of the United States are not deprived of the existing VHF channels upon which they so greatly rely and at the same time to insure the continued development and full utilization of UHF television, I urge that the committee report favorable such a bill as H.R. 9267, which would give the FCC power to foster the development of UHF television without disrupting our existing television system.

And I might say, Mr. Chairman, that I was rather naive in holding hearings in my area. I realized that this was important, because I had received over 1,200 personally written letters. I should have been like the distinguished gentleman before me and not held hearings, but I was rather naive, I did have hearings.

I had a tremendous attendance. Everyone there was in favor of not making the change. We have a lot of people in our area—it is strictly rural—whose only channel to the outside world is channel 3.

And I say this because in the 21-county area we have at this time not one full-time radio station, and when the sun goes down, without channel 3 in our border areas, we would have no contact at all in regard to weather and many other things that we are dependent upon that WCIA makes available. So this makes the problem twice as serious in the areas where they do not have full-time radio stations.

That concludes my statement.

Mr. MACK. Mr. Chairman.

The CHAIRMAN. Mr. Mack.

Mr. MACK. Is it not true that if channel 3 is eliminated Effingham County would be left without any type of service?

Mr. SHIPLEY. That is true. And I think all of Cumberland County would fall in that category. And I believe Jasper County would fall in with this group too. That is the only service that they get, channel 3.

Mr. MACK. Isn't it also true that it would be impossible to justify a UHF station at Effingham, a town of 10,000 population?

Mr. SHIPLEY. I wouldn't invest any of my money in it, I know that, or advise anybody in my district to, because it is not feasible.

Mr. MACK. It is my understanding also that a TV cable system has been proposed for Effingham in the event that channel 3 is eliminated, which probably would serve only the city of Effingham itself. But it is also true, is it not, that if this develops, the rural areas and smaller towns in that county will not have any opportunity to even have the cable service?

Mr. SHIPLEY. As I understand it, they wouldn't be able to hook onto the cable service regardless.

Mr. MACK. Thank you, Mr. Chairman.

The CHAIRMAN. Any further questions?

Mr. ROBERTS. Mr. Chairman.

The CHAIRMAN. Mr. Roberts.

Mr. ROBERTS. I would just like to congratulate the gentleman and compliment him on his statement. First of all, I appreciate the bill that he has introduced. Secondly, I think he has given the members of this committee a fine example in holding hearings in his own district on this legislation. I don't think the gentleman had to say he was naive.

Mr. SHIPLEY. I think I was very clever in doing it, in bringing up firsthand information.

Mr. ROBERTS. Thank you.

The CHAIRMAN. If the committee were to see fit to deal with these two subject matters separately, should it determine that that would be the most feasible way of bringing about some definite action, would the gentleman approve that course of action?

Mr. SHIPLEY. I think so.

The CHAIRMAN. Thank you very much.

Mr. Dominick.

Mr. DOMINICK. Mr. Shipley, I was most interested in the statement that your area could not support a UHF station as far as you could see——

Mr. MACK. If the gentleman will yield, I think I made the statement, I asked him to confirm if that was true.

Mr. DOMINICK. If that is true, then is there any advantage to the people in your district in requiring that all new sets that they purchase contain a reception method for UHF stations which they are never going to receive?

Mr. SHIPLEY. Well, I don't know if I can answer that for the people or not. For myself, I don't think that the sets manufactured before 1958 are equipped to receive the UHF. I do know this, and if I am not digressing from answering your questions, that we have a lot of elderly people, retired farmers, who don't have the money to make the change. That is the reason they are so bitterly opposed to it. I don't think the economic situation in my part of the State would warrant a UHF channel, I can't see such a station moving into my hometown or any other like it. There are 200 villages and towns in my area, but the biggest city would probably have a population of 20,000. So it is not feasible or economically possible.

Mr. DOMINICK. Thank you very much.

The CHAIRMAN. Thank you.

Mr. SPRINGER. May I ask unanimous consent to insert the statement of Senator Dirksen?

The CHAIRMAN. The statement of Senator Everett Dirksen will be included in the record at this point.

(The prepared statement of Senator Dirksen follows:)

STATEMENT OF HON. EVERETT DIRKSEN, A U.S. SENATOR FROM THE STATE OF ILLINOIS

Mr. Chairman and members of the committee, I appear before you today to comment upon the matter of legislation to require that television sets shipped in interstate or foreign commerce be equipped to receive all 82 channels now allocated to television broadcasting. Legislation of this type is of vital interest to American people as a whole and to the people of my State in particular.

I have always vigorously opposed Government action in the area of business affairs, except when it is required for compelling public interest reasons. And when such action is necessary, it should be carefully confined to accomplish the congressional purpose.

This present instance is one where appropriate Government action is warranted. The growth of UHF television is now severely retarded by the fact that most people's sets cannot pick it up. Appropriate all-channel receiver legislation would bring about the growth of UHF television side by side with, but not instead of, VHF television.

But I do not understand the motive behind the request of the Federal Communications Commission for S. 2109 and I do not believe that S, 2109 is carefully confined to compelling public interest purposes.

The FCC in recent months has launched a farflung plan to "deintermix" television channels on a broad scale, with the result ultimately of completely destroying existing VHF service throughout the United States. The State of Illinois is slated to be one of the first victims of this plan. The Commission is now actively moving to delete two of our fine existing VHF television stations, WCIA, channel 3, in Champaign and WREX-TV, channel 13, in Rockford, two of the eight stations which the FCC has singled out for initial action. Moreover, the FCC proposes to expand this list until all or a substantial portion of the United States is UHF. It does not make sense to me that the FCC should at the very same time be seeking legislation which would permit the UHF to expand as part of a combined VHF/UHF system and be taking action to destroy valuable and effective VHF channels.

Thus, I am appearing here today to make clear to you my earnest conviction that S. 2109 should not be allowed to become a vehicle for moving VHF stations to the UHF. To that end, this bill should be amended to provide that the FCC shall have no power to disrupt VHF service by requiring existing VHF stations to shift to the UHF. In effect this would be like the "grandfather" provisions enacted by the Congress in other situations in the past.

Such an amendment is particularly important for rural and smalltown people such as those in my State of Illinois. It is a well-known fact that UHF stations simply do not cover as wide an area as VHF stations. For example, approximately a million persons now rely on channel 3 in Champaign for essential local and area news, weather and crop reports, religious and educational programs and other important public service programs. I am informed that deletion of channel 3 from Champaign would deprive approximately 600,000 persons of the television service which they now enjoy, need, and rely on. Indeed, approximately 140,000 persons would be within what the engineers call a white area without any television service at all.

It is appalling that the Federal Communications Commission to whom the Congress has delegated the sacred trust of licensing the use of our precious television channels so that all the people have an equitable share of television service would take such action. I am all the more perplexed when I recall that in 1958 the Commission expressly declined even to consider destruction of channel 3. Moreover, as recently as February 1960, a scant 2 years ago, the Commission stated:

"The Commission is likewise convinced that deintermixture—the assignment of VHF-only facilities to some communities, and UHF-only to others—cannot provide a long-term answer to the allocations dilemma. Deintermixture limited to selected communities cannot provide the needed stimulus for future UHF expansion. Area deintermixture, on the other hand, would involve large-scale disruption to the public and introduce inequities and inefficiency in the distribution of station facilities among the separate communities and States."

One is compelled to ask what revolution of events has occurred in such a short time to justify this change of position. I know of no such revolution and I am mystified as to what the people of Illinois and of the other States that are or will be involved have done to call down upon their heads such misfortune.

Moreover, under section 307(b) of the Communications Act of 1934 each State is entitled to "a fair, efficient and equitable distribution of * * * service." Illinois now has only eight commercial VHF television channels assigned by the FCC in spite of the fact that it is our fourth most populous State. By contrast, our neighbors in Missouri less than half our population, have 17 commercial channels assigned, more than twice the number assigned to Illinois. I am unable to understand why the Commission would wish to increase this inequity.

Let it be entirely clear that I support development of UHF television channels. The more channels are opened up, the more scope there will be for expansion of private enterprise. But there is no reason why development of UHF must be at the expense of existing VHF channels. Let the two types of stations compete in the traditional American fashion. Let them grow side by side, each contributing to the public interest.

I should like to bring to your attention what I deem to be another deficiency in S. 2109. This bill is not confined to compelling public interest considerations. The bill, it seems to me, goes too far. As presently worded, it would allow the Commission to impose far-reaching requirements upon manufacturers of television receivers—size of screen, all-color sets, number of tubes and other extraneous matters. I submit that the delegated power should be limited to the purpose which calls forth this bill, that is, the purpose of insuring that television sets are able to pick up the 12 VHF and 70 UHF channels allocated to television broadcasting.

Let me say in conclusion that if the committee does not see fit to amend S. 2109 as I have suggested, it would be preferable to have no receiver legislation at all, for if the FCC's purpose in requesting the introduction of S. 2109 is to aid deintermixture or all-UHF proposals, rejection of the bill would at least have the effect of showing congressional displeasure with this ill-conceived idea.

The CHAIRMAN. The Honorable John B. Anderson.

STATEMENT OF HON. JOHN B. ANDERSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. ANDERSON. Mr. Chairman and members of the committee, it would seem that the State of Illinois is well represented here this

morning not only on this committee, but also in the number of witnesses that have appeared before it.

I must say that I am here this morning not only because of academic interest in the subject which you are considering, but also because of interest in the subject of deintermixture, which seems totally involved in the subject matter of H.R. 8031 whether we like it or not, and which is of very definite interest to the people of the 16th District of Illinois whom I have the honor to represent in Congress.

I can certainly add to what has already been said by the other gentlemen from Illinois, particularly the distinguished minority whip, Mr. Arends, that I know of no other issue that has generated as much spontaneous protest from the people of my area as this single issue. I was led, somewhat facetiously, to remark to one of my colleagues that the law might decree that a man should lose his house or his car or anything else, but not his television set; nothing would create as much protest as the idea of taking away the VHF signal from the area I represent.

Certainly I join my colleagues in supporting the principle of all-channel receiver legislation. This, I think, would facilitate and encourage the further development of television in addition to what we enjoy today. I have introduced H.R. 9291, which I think would have the effect of achieving the purpose of H.R. 8013, but at the same time the bill which I have introduced is carefully tailored to deal with the problem in hand.

At this point I would like to digress and say that I certainly claim no part of authorship or originality as far as H.R. 9291 is concerned. I would like to pay tribute to the distinguished gentleman from Alabama on this committee, Mr. Roberts. I had the option of selecting from his bill and a number of bills that were on file at the time, and it the power conferred is not to be used in such a way as to injure or destroy the fine television service which the people of this country now enjoy.

I am very much concerned lest under the FCC's bill the power conferred on the FCC might be used not to promote and foster the further development of our television system, but to injure it. Unless appropriate restrictions are placed on this power, it could be used as part of a program by the FCC to shift VHF stations to UHF in selected areas of the country or throughout the country. This would be a catastrophe. Because UHF stations serve a smaller area than VHF stations, shifting VHF stations to UHF takes service away from the people in outlying districts. Most of the people so affected are smalltown and farm people who are particularly in need of television service. My own district shows the glaring injustice of substituting UHF channels for VHF channels. The FCC is currently proposing to destroy the wide-area service of not one but two VHF stations serving the people of my district. One of these is in my hometown of Rockford, and the other is in Madison, Wis. Many smalltown and rural people in my district depend on these stations for much of their television service.

And I might say this in line with what was mentioned by one of the earlier witnesses today, that the western part of my district is one of those heavy, wooded areas where the weaker UHF signal

just simply would not be sufficient to reach the television market. And therefore, there is one area, geographic area in my district which would be left without any grade B or better television service at all if this proposal goes through and the logical course of this so-called deintermixture is to spread throughout the country until we have nothing but UHF television left.

Thus, while I am strongly in favor of legislation to encourage the development of all our television resources by giving the FCC power to require that sets be able to receive both UHF and VHF channels—as my sponsorship of H.R. 9291 demonstrates—I think it is vital to insure that the powers conferred by all-channel set legislation not be used to pave the way for more mutilation of our television system by deintermixture or by making all our television UHF. And if the FCC does not plan to use these powers for that purpose, surely it can have no objection to a bill that makes it clear that these powers are not granted to it for that purpose.

I therefore strongly urge the committee to report favorably on legislation such as H.R. 9291 and the companion bills now before it.

The CHAIRMAN. Thank you, Mr. Anderson, for your statement.

I might say that in recent years there was an attempt to bring about legislation which would transfer all commercial broadcasting to ultrahigh frequencies. So there have been various approaches to this problem of better utilization of spectrum.

Now, the gentleman has expressed the preference that he thinks is the best approach. I assume what the gentleman desires us to bring about is some positive accomplishment, is that not true?

Mr. ANDERSON. Certainly, Mr. Chairman, I would agree with what your have said, that this great resource that you have referred to, the spectrum, ought to be utilized to a maximum. My only wish in this regard is that in the process of assuring that maximum utilization we do not do something to destroy the television reception that some people in this country are currently enjoying and which they simply wouldn't enjoy without the VHF signal.

The CHAIRMAN. And I assume, then, that the gentleman would support whatever effort would be the best that we could make to reach that objective?

Mr. ANDERSON. I certainly would join the chairman in that hope; yes.

The CHAIRMAN. I assume you also realize that in dealing with the all-channel receiving sets there is a problem of economics involved. There is the value of billions of dollars of property that is in homes throughout the country, and the attrition that has to be recognized over a long period of time in bringing about the use of such receiving sets. That is one question. And the question of the so-called deintermixture, and so forth, is an entirely different subject, though they are related as to their ultimate effect. And now, if the committee can work out some way of bringing about assurances that these problems would be resolved, I suppose the gentleman would want us to do it that way.

Mr. ANDERSON. Yes, Mr. Chairman.

The CHAIRMAN. Thank you very much.

We have our colleague from Oklahoma, the Honorable Tom Steed.

STATEMENT OF HON. TOM STEED, A REPRESENTATIVE IN CONGRESS FROM THE FOURTH CONGRESSIONAL DISTRICT OF THE STATE OF OKLAHOMA

Mr. STEED. Mr. Chairman and members of the committee, I am here today to lend my warm support to H.R. 9267, by Mr. Roberts; my own bill, H.R. 10429; and similar bills which you have before you for consideration, and to voice my deep concern over the FCC-supported bill, H.R. 8031, which you are also considering today. All these bills deal with the same problem. That problem is the question of insuring widespread distribution of television sets able to receive both VHF and UHF channels, in order to provide an incentive for the development of the UHF television resources of our country side-by-side with the VHF television resources. Bills such as H.R. 9267, H.R. 10429, and companion bills deal with that problem in a much more desirable way than does the FCC bill, H.R. 8031.

In the first place, the FCC bill is much too broad. My understanding is that the FCC describes this legislation as empowering them to require that television receivers be able to receive all channels, both VHF and UHF. As it stands, however, the FCC bill appears to give the Commission almost unlimited power to prescribe specifications for television receivers. Bills like H.R. 9267 and H.R. 10429, on the other hand, very clearly give the FCC only the power that it needs in order to open the way to full development of the UHF channels.

The bills I support also have another and even more important feature. They would prevent the FCC's utilizing the widespread distribution of all-channel sets as an argument in favor of shifting VHF stations to UHF. The FCC has recently embarked on a widespread program to deintermix many areas and make them all-UHF. I understand that one of the reasons given for the selection of the cities that were to be deintermixed in this program was the fact that in those areas there was widespread distribution of sets able to receive UHF. If the power proposed to be conferred in the bills before the committee is not carefully restricted, in a few years this same excuse could be advanced for making any section of the country, or the entire country, all-UHF and doing away with VHF television altogether.

This deintermixture has an extremely disruptive effect on television service, particularly television service to people in rural and small-town areas, because the coverage area of a UHF station is smaller than the coverage area of a VHF station. Shifting a VHF station to UHF therefore takes the station's service away from people in outlying areas. Such action would be strongly contrary to the public interest.

Moreover, it is a source of considerable surprise to me that the FCC should have started this broad deintermixture program before the conclusion of the tests of UHF it is currently conducting in New York City. In 1960, the Commission came before the House Committee on Appropriations, of which I am a member, and asked for more than $2 million in order to conduct this experiment, saying that it had to have such information in order to resolve the problem of television allocations. As this committee knows, the Congress appropriated $2 million for this purpose. Nevertheless, the FCC has moved ahead with dis-

ruptive deintermixture and perhaps all-UHF proposals without waiting for the results of this experiment.

I thus warmly support such bills as H.R. 9267 and H.R. 10429. All-channel received legislation is highly desirable, because it offers the best way to further the development of all our television resources in the most efficient manner. But it is absolutely vital, in the light of the FCC's recent actions, that the Congress insure that the power conferred by such legislation be used to help, rather than to hurt, the television service enjoyed by our people.

If, however, we of the Congress should decide not to confer on the FCC the power to prescribe all-channel television receivers, certainly the FCC should not attempt to reach the same result through indirection by deintermixture or nationwide all-UHF.

Mr. Chairman, to give a little dramatic illustration as to what this could do to the outlying rural areas, I was home last week, last Tuesday. Your section of the country and mine was hit by a freak blizzard. The weather forecast had not anticipated this blizzard, and the farmers of southeastern Oklahoma and parts of Arkansas and Texas had from 1 to 3 hours' notice solely because of the television service they received. The loss to livestock and other damage was minimal because of this great television service.

Recently I have been in communication and touch with the Research Department of Cornell University, which is preparing to go down into our section of the country with their new Doppler radar and their tornado warning program. They believe that they have a breakthrough now which will make it possible for them to give any specific area, almost pinpoint it, where a tornado might strike, give the people of those areas some warning in time to protect themselves. As you know, in recent years through the cooperation of surplus radar equipment furnished by the U.S. Air Force, television stations in our part of the country have been able to give very improved tornado warnings, with a dramatic reduction in the loss of life from this phenomenon of nature. Now that we are at the point where we can give a certain protection to our people, I think it would be tragic to curtail the television coverage in that section of the country.

Now, I think I have, in my district, probably the most typical or the only typical rural television station in America. It serves most of southeast Oklahoma, most of my district, and almost all Congressman Albert's district. And it is the only television service most of them can get. And yet it has an economic problem, even in a setup like that. And because of the cost of maintaining one of these services, I just don't see how any type of television service, short of what they now have, could ever economically be provided for these people in that part of the United States, and I am sure that it is not unlike most other rural sections of the country. I don't believe a lot of people realize that to the farmer television is not entertainment, it is a vital service to him. And a visit in Oklahoma and Arkansas and Texas last week points up that even with just an hour or 2 or 3 hours' notice, they were able to take advantage of this warning and avoid a lot of the livestock damage. The blizzard hit in the morning and, in a matter of 2 or 3 hours, up to 9 inches of sleet and snow covered that area, and in the next 48-hour period the thermometer got down below zero. That could have resulted in a lot of livestock and farm damage if they

hadn't had this brief warning to get ready for it. And I think that this one case dramatically points up the fact that we ought to make sure that the present television facilities of our people are not interfered with.

I thank you for the opportunity of making my views known.

The CHAIRMAN. Thank you, Mr. Steed, for making your views known, and for the incident which you referred to.

Are there any questions by committee members?

Mr. Dominick.

Mr. DOMINICK. Thank you, Mr. Chairman.

Again I am interested in the economics of this. Have you made any investigation as to whether your area could support a UHF station in addition to a VHF station?

Mr. STEED. I don't believe it could. And I am fairly close to it. I know that there has been some interest there in promoting such a facility in both Mr. Albert's district and mine. And up to this time those who have been interested in it and went into the enginering and other aspects of it came to the conclusion that it was not feasible. I think the VHF rural station we have now is about the only sort of thing that could be provided, and that is only because of the additional range that it gets.

Now, anything with a shorter range than what is now available I do not believe could be economically justified. The folks who have been wanting to put their money into this sort of a thing have come to that conclusion. So I don't think that there will ever be any substantial UHF facilities in that part of the country because of economic reasons.

Mr. DOMINICK. Isn't it also true, then, that if we pass a bill which requires that all receivers contain UHF receiving ability that we are in effect saying, "We want to promote UHF," and that the only way that you could promote it in your area would be to eliminate VHF and put one or more UHF stations in that area?

Mr. STEED. I would think that would be obvious.

Now, I have no objection to people wanting these sets that will receive all channels having them. But it has been my experience that to require that would be hard to justify. I don't see how a person in my part of Oklahoma buying such a set would ever receive a nickel's worth of benefit out of the UHF side of it.

Now, you might justify that on the basis of the national interest in wanting the whole spectrum used, but I think there would be an economic waste there. I have this feeling, that if and when UHF in any area offers something that the people want, they will voluntarily find a way to get it, just like they have found a way to get the television they now have. And I think we are getting into dangerous ground whenever we begin to tell people they can't buy anything unless they buy a particular thing. I hate to see any of this voluntary selection taken away from our people.

Mr. DOMINICK. Thank you, Mr. Congressman. May I say that I subscribe to those viewpoints.

The CHAIRMAN. Mr. Thomson.

Mr. THOMSON. Congressman, I was interested in your observation that the FCC has failed as yet to complete their studies in New York City on the general effectiveness of UHF telecasting. My question is,

In the event that this Congress does not act on your bill on H.R. 9277 or similar bills, would you then support House Resolution 450, which would postpone any FCC reallocation of stations or any deintermixture until the time that the results of the New York study were available to the Commission and to the Congress?

Mr. STEED. Well, I think that is the least we could do. I would like to see the thing settled once and for all now. It is true, we are investing $2 million up there on an experiment, and some of the metropolitan areas of the country could reap some very valuable benefit from it, I would hope. And I would hate for us to be in a position not to take advantage of any scientific value that would come from it.

But still I think it is obvious that in a great deal of the country that anything they have learned in New York City wouldn't apply, anyhow. And I hope we solve it, but certainly, if we are not going to do the one thing, the least we could do, I think, would be to put it on cold storage until we know more than is now known.

And further than that, I think, we don't know what the next few years may develop in the way of the satellite communication facilities which could—I am not an engineer, but I see some possibility that it might bring some factors not even known now into the picture that might help a lot of this problem. And I think changing this thing right now as the FCC seems determined to do is a highly undesirable and foolish thing.

Mr. THOMPSON. Congressman, wouldn't you go so far as to say, then, that the least the Congress should do and the least that the FCC should do is to delay a decision on deintermixture until they have completed that study?

Mr. STEED. I am surprised, as I said in my statement, that they went ahead with this deintermixture statement in the places they did after the representations they made to get the money to run the experiment in New York. It seems to me like they were putting the cart before the horse.

The CHAIRMAN. Thank you very much. I want to get to Mr. Avery before the Rules Committee calls him.

Mr. STEED. I thank the committee for this opportunity.

The CHAIRMAN. Thank you very much.

We are glad to have our colleague and former member of this committee, Mr. Avery, before us again.

STATEMENT OF HON. WILLIAM H. AVERY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF KANSAS

Mr. AVERY. I might say that I observe that nothing much has changed since I left the committee. When I left about 1 year ago these same matters were pending before the committee, and they are still here. The loud airhammer outside the building was running when I left, and it is still running today, so that it is hard to hear in the committee room.

In view of the lateness of the hour I would like unanimous consent to file a brief statement for the record and make a few short remarks.

(The prepared statement of Mr. Avery follows:)

STATEMENT OF HON. WILLIAM H. AVERY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF KANSAS

Mr. Chairman and members of the committee, my name is William H. Avery. I am the U.S. Representative from the First Congressional District of the State of Kansas. It is a pleasure to be back with the committee again, though as a guest rather than as a member.

Naturally, as a former member I am generally familiar with and deeply concerned by the problem of the most effective utilization of our television resources. I strongly support appropriate legislation to authorize the FCC to require that television receivers be equipped to receive the UHF as well as the VHF channels.

This legislation will be an important step in the development of television, by giving the potential UHF broadcasters assurance that the public will be able to receive their signal.

But development of the UHF channels must not be at the cost of destroying our VHF service. VHF and UHF must operate and develop side by side and not as substitutes for one another.

The FCC-sponsored bill before the committee, H.R. 8031, is aimed at the general principle of all-channel set legislation. But I fear that the unrestricted power apparently conferred by this bill could be used by the FCC to implement a program of "deintermixture" or to turn our whole television system into all-UHF. Such a systematic destruction of the VHF channels would not be in the public interest and would cause much readjustment in the industry and among the viewing public.

Based on my knowledge of UHF, I am concerned that it does not have the range and that it cannot cast a sufficient signal to serve many rural and suburban areas, such as are predominant in the Midwest. Thus, if a system of UHF stations was to be entirely substituted for the present combination of V's and U's, the only logical conclusion is that a large number of television viewers would lose their television service, perhaps their only service, unless boosters were installed by the licensee or by a community. Whereas a complicated system of boosters might be feasible in theory, I fear that we would be creating more problems by their establishment that we would be solving by a shift to an all-U system.

I am aware that several bills are pending before the committee which would preserve all existing VHF licensed stations. I am not taking the position that every single V should be retained, as I recognize it may be possible from an engineering standpoint to convert a few limited markets to a U system without unduly trespassing upon the established television service in the area. If such areas are found to exist, I think the Commission must proceed, but at the same time it must be able to defend with complete engineering data and performance proof of such a decision.

Finally, I do not support the premise that under present market conditions a great number of additional television facilities are economically justified. I hope that the Commission does not, by their actions or by their comments, mislead applicants as to the unsatisfied demand for additional television outlets. As population increases and metropolitan areas grow, there will no doubt be opportunities for growth in the broadcasting industry, but I do not believe that demand for a great number of additional television broadcasting facilities is widespread at this time.

Mr. AVERY. No. 1. There is not a VHF station in the area affected by this proposed deintermixture, and my interest in it is entirely academic.

No. 2. I am in complete agreement with the chairman that the matter of an all-channel receiver set should not be considered in the same bill with the matter of the so-called deintermixture. I think they are two separate and distinct problems, and the committee should approach them from that viewpoint.

The CHAIRMAN. The gentleman would not object to considering them simultaneously just so they are not tied together?

Mr. AVERY. May I state for the record that I hope they are not contained in the same piece of legislation. They should be considered in the same series of hearings as they are directly related.

I am in support of H.R. 8031, the bill requiring the all-channel receivers, except that I understand that some lawyers have read into that bill perhaps a delegation of authority to the Commission so that they could proceed with a complete deintermixture program. If that is the case, then I would defer to the lawyers on the committee and the staff, I would hope that that could be made abundantly clear in the legislation or in the committee report.

The CHAIRMAN. I would say to the gentleman that I think the language in that bill is unusually broad, and I think that the committee should give consideration to writing the language that would accomplish the objective it sought.

Mr. AVERY. I am in agreement with the chairman on that point of view, and I am sure the committee would want the point to be abundantly clear one way or the other, whichever way their final conclusion might be.

I do not share the apprehension of the gentleman from Colorado, Mr. Dominick, on the economic burden this legislation might inflict upon persons and viewers not within a U market. We do not have time to discuss that point. I feel that the public interest would justify the slight imposition that requirement would impose on the viewers.

Now, in regard to deintermixture, let me say this: I represent a rural area, as do a number of members of the committee, and a number of previous witnesses. I realize that those of us who represent rural areas have a special responsibility, shall I say, to preserve the V channels. On the other hand, I would hope the committee would not pass a bill comparable to the Roberts bill whereby the Commission would be precluded forever, for all practical purposes, from deintermixing any specific market.

We are in a changing situation today, and I think that this conclusion must be, it obviously must be, a technical, engineering, and economic determination. I would hope it would not become a political determination. I do not feel, frankly, that the FCC is proceeding beyond their established jurisdiction, but I would hope that the record of this hearing and the other hearings that might be conducted simultaneously would make it abundantly clear further that the Commission should be attuned very closely to the attitude of this committee in any deintermixture program that they might have under consideration. I think it is really more important that they stay close to this committee than the House itself, because it is an exceedingly technical field, I don't say it is beyond the understanding, but certainly it is beyond the experience of the House membership at large.

I would cite as an example the test that this committee approved for pay TV, is another exceedingly technical matter. By close liaison between this committee and the FCC the rules for the test were established, and I think are proceeding pretty much in general as this committee envisioned.

That, Mr. Chairman, is my statement.

May I thank you for your generous consideration of my time problem.

The CHAIRMAN. Your entire statement will be included in the record. And we want to thank you for your appearance here.

Mr. Mack.

Mr. MACK. Mr. Chairman, I don't want to delay the witness. But I am reminded by his statement that the Federal Communications Commission has been considering this matter for many years. I believe that it was first proposed as long ago as 1954 or 1955. To the best of my knowledge they have not actually deintermixed any area of our country except Fresno, Calif. And that was done on a voluntary basis.

Does the gentleman feel that if this were the appropriate action to take that the Federal Communications Commission would have preceded someplace else in this 8-year period?

Mr. AVERY. If it were the appropriate—I am not quite sure that I get the gist of your question here.

Mr. MACK. I will ask you if you do not feel that there is some apprehension in the minds of the Commission in terms of whether or not they have the authority to proceed in this area?

Mr. AVERY. I am not so sure, Mr. Mack, that I think this could be construed as apprehension as to authority. I think it is more caution, perhaps, that they are proceeding in the public interest as they very well should. The California market, of course, was a voluntary determination, but it maybe did not become voluntary in its initial stages, maybe it resolved itself into a voluntary deintermixture assignment. Apparently that was not possible in the case of these eight other markets that are now under consideration.

Mr. MACK. I would like to yield to my colleague.

Mr. ROBERTS. I am not sure that I understand the gentleman's position. Does the gentleman think that it is fair for an area to be deprived of a V signal and be given a signal which admittedly will not serve the people who have been getting VHF–TV service?

Mr. AVERY. Well, the gentleman is assuming that if this V signal goes off the air that no signal will be received. I don't think that is quite a fair assumption. In any deintermixture proceeding, the Commission should be very sure that television reception will not be reduced. If the gentleman is familiar with rural areas as we know them, especially in the far Middle West east of the Rocky Mountain area, there is quite an elaborate system of relays that provide a very adequate signal.

Mr. ROBERTS. You heard Mr. Arends' statement as to what it would do to his part of Illinois, you heard Senator Bush say what it would do to half of Connecticut, and I have heard what the engineers tell me it will do to my particular area, it will reduce coverage from 20,000 square miles to 5,000 square miles, and I don't think those facts have been controverted by any other witnesses.

Mr. AVERY. It is my understanding that those facts were not based on the assumption that a satellite system could be established, they were based strictly on the fact that we are going to go either one way or the other, either from one V to one U, and disregarding the possibility of further projecting that U signal by relay. But this is a presumption on my part, because I don't know on what basis the previous witnesses made those statements and on what basis the engineers were projecting their conclusions in reply to the gentleman from Alabama. If you are just talking about a U signal versus a V

signal, of course, there is no argument about that, we are talking about the differential between 90 and 40 miles.

The CHAIRMAN. Mr. Springer?

Mr. SPRINGER. In that connection, may I ask if the gentleman has satellites in his district?

Mr. AVERY. None in our district. We have some in Kansas.

Mr. SPRINGER. I have two in my district. And I think they are doing the best they can, they are trying to do a good job, but it certainly isn't proving out satisfactorily from a reception standpoint.

Mr. AVERY. It may not be universally true.

Mr. SPRINGER. In other words, maybe something more should be done about it. I don't know. I am not closing my ears to this. But at this time it is not proving to be a satisfactory operation in this area.

I have had some experience with this whole satellite thing, and I have talked to other people who have. There are other factors that have great effect on the satellite proposition. We have a satellite in Springfield, and one in Decatur, in my own district. So I have had some experience with them.

But the problem I want to raise with the gentleman is this: He raised a few points that no other person who testified has raised. Does the gentleman have any doubt as to what the Commission further has in mind as to extending the——

Mr. AVERY. Yes; I have grave doubts about that.

Mr. SPRINGER. Are they going to or not?

Mr. AVERY. It is my present understanding that they do not anticipate any further designation. Let me say, I am not supporting per se these eight proposed markets for deintermixtures. The positive statement that I made is this: I would hope the committee would not take the position that, no, we must not have any deintermixtures, because I think that is sort of a negative approach.

Mr. SPRINGER. My question to you is, Do you think that they did not have in mind any other deintermixture other than these——

Mr. AVERY. I know there have been some extensive investigations, shall we say, but it was not my understanding that they had come to any conclusions so far as any deintermixtures were concerned.

Mr. SPRINGER. Is the gentleman's mind open on that, to being convinced that they could have that in mind?

Mr. AVERY. My mind is open; yes.

Mr. SPRINGER. I am reading to you from last July's order, July 1960:

> Deintermixture: First, the Commission believes it is of prime importance to increase the number of communities where all television stations are confined to the UHF band.

That is one statement.

In the same paragraph:

> The Commission attaches importance to making a start by initiating proceedings in the above-named markets.

And those eight markets are above.

> It is contemplated that, as indicated by further study and developing circumstances, and in response to further proposals, additional deintermixture proceedings will be initiated in further markets at a later time.

May I say that I have a list of the markets here that you would want to know about in which they studied—I could read them to you, the ones in addition to those that are now under study: Montgomery, Ala.; Lancaster; Harrisburg; Columbus, Ga.; Baton Rouge, La; Fort Smith, Ark.; Bay City, Mich.; Saginaw, Mich.; Lake Charles, La.; Knoxville.

Those are the ones as to which studies have already been made.

There is a great deal of information available to the committee and the people who don't know. This is the next paragraph:

Additionally, improvement which the legislation can bring about on the receiver incapability of problems would, in time, make possible a more thorough reallocation of channel assignments looking toward providing substantially all UHF assignments in certain areas of the country where population is dense and communities capable of supporting television stations are located close together.

In the same paragraph:

Unless it be that all television can be shifted to the UHF portion of the spectrum, such as originally deintermixed system may permit the most effective possible use of the 82 channels that are now allocated to television. The impact of such widespread allocation changes will be mitigated not only by the wide dissemination of all-channel sets, but also by a transition period in which existing VHF channels will be allowed to broadcast simultaneously on UHF channels.

There, that is pretty broad, and that is pretty extensive. That is their order. This is the proposed rule which they have asked for.

So I merely brought this out because I think the gentleman did raise a real important question of, What does the Commission have in mind? And when I read this language I can't come to any other conclusion.

Mr. AVERY. Let me repeat—may I do so for my colleague from Illinois—that I think it is extremely important that this committee keep very close to the Commission as to what intention they may have expressed or implied as to what they anticipate in the future, because it is this committee that I think not only has the responsibility, but they also have the knowledge to guide the Commission.

Mr. SPRINGER. I merely raised it because I think the effect of what they intend to do is rather widespread, not narrow.

Mr. AVERY. I think it is a good point to expound upon.

Mr. SPRINGER. Thank you, Mr. Chairman.

The CHAIRMAN. I think that is one of the big problems that the people fear, that this is a step toward ultimately taking all television to the UHF band. The committee is going to keep in tune with it, I will tell you that. Thank you very much. We are glad to have your statement.

Mr. AVERY. In keeping with the usual attitude and efficiency of the committee, I rather anticipated that they might stay very closely in tune with the Commission. Thank you.

Mr. DINGELL. Mr. Chairman, I would like to welcome my old friend to the committee, and desire to ask him this question: If he had deintermixing going on in his district, would he feel as he has indicated this morning?

Mr. AVERY. That is a hypothetical question, and you would have to anticipate a hypothetical answer. I believe that is the only positive response that I could make to the gentleman. I realize that

members on the committee and witnesses appearing before the committee representing specific areas have a very special problem. But there seems to be a broader problem representing public interest, too.

Mr. DINGELL. I thank you.

The CHAIRMAN. Thank you very much. May I inquire if there are any of our colleagues in Congress who cannot come back this afternoon?

Mr. Edmondson of Oklahoma.

STATEMENT OF HON. ED EDMONDSON, A REPRESENTATIVE IN CONGRESS FROM THE SECOND CONGRESSIONAL DISTRICT OF THE STATE OF OKLAHOMA

Mr. EDMONDSON. In view of the lateness of the hour and my own commitments this afternoon, I would appreciate the opportunity to file a complete statement in support of legislation of the type of H.R. 9267, the Roberts bill, and its companion bills which this committee has under consideration.

The CHAIRMAN. Very well, we will be glad to receive it for the record at this point.

(The prepared statement of Mr. Edmondson is as follows:)

STATEMENT OF HON. ED EDMONDSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OKLAHOMA

Mr. Chairman and members of the committee, my name is Ed Edmondson, Member of Congress representing the people of the Second District of Oklahoma.

I wish to lend my very strong support to legislation of the type represented by H.R. 9267—the Roberts bill—and its companion bills which this committee has under consideration. Similarly, I oppose H.R. 8031, which the Federal Communications Commission has requested, unless it is amended in line with the principles of the Roberts bill.

This legislation deal with a subject of great concern to the people of my district. The people of my district depend for their television service on stations assigned to cities outside the district, such as Tulsa, Okla., Joplin, Mo., and Fort Smith, Ark. Many of the people of my district live quite some distance away from any of these stations. If these stations were not VHF stations able to serve a wide area, but instead were relatively short-range UHF stations, many of our people would have little or no television service. I am sure there are vast areas of the United States whose people similarly depend on wide-area VHF stations for television. It would be a terrible thing for the FCC to wipe out this VHF service and substitute UHF television which would not be able to provide service to rural and smalltown people.

Yet for some reason which I cannot understand, the FCC is threatening to destroy VHF service in many areas and substitute UHF service. None of the VHF stations which the FCC presently plans to turn into UHF stations is located in Oklahoma. However, the FCC has said very clearly that it intends to extend this policy to yet other cities. So maybe my district is on the FCC's list. Maybe it is even going to be the next to go. In any case, it seems to me that the only logical course of this policy is for UHF-only areas to spread steadily across the country until all the VHF service has been destroyed. Last summer the FCC even said it was thinking about moving all television to UHF. Thus, I get very little comfort from the fact that none of the VHF stations currently proposed for shift to UHF by the FCC serves my people. The fine television service that the people in my district now have is being threatened.

On the other hand, I support the idea of authorizing the FCC to require television sets to be able to pick up both the VHF and the UHF channels. Most of the future growth of television will have to be on the UHF channels, because there are not many places left in which more VHF stations can be located. UHF television has grown slowly so far because most people do not have sets able to pick up UHF stations. If the FCC were given authority to require that

all sets be able to pick up both the VHF and the UHF channels, this difficulty would be eliminated.

However, once a large percentage of our people have all-channel sets, the FCC could then argue that it would do no harm to force VHF stations to go to UHF. In view of the many smalltown and country people who would lose television service by such action, I fail to understand the logic of this argument. Nevertheless, the FCC seems to think it is logical, since one of the reasons it advanced in proposing to eliminate the VHF stations which are currently under attack was that a large proportion of the people in those cities had sets that could receive UHF.

Therefore, while I strongly support legislation to give the FCC power to require that television sets be able to receive all VHF and UHF channels, I do not think that the FCC should be given this power unless it is very carefully restricted so as to prevent it being used as a weapon to turn VHF stations into UHF stations.

Some people might object that we of the Congress should not try to tell the FCC not to go any further with this disruptive program of turning VHF into UHF. But we of the Congress have never hesitated to make it clear to Government agencies how they shall and shall not use the power which we delegate to them. Countless examples could be mentioned. To cite just one, when the Congress gave the Interstate Commerce Commission power to regulate motor carriers, the Congress explicitly directed the ICC to preserve existing motor carrier service. Such "grandfather rights" have been included in many grants of new power to agencies, in order to make it clear that the agency is not to use this new power to destroy useful service that has already been built up.

I therefore urge the committee to recommend the enactment of legislation authorizing the FCC to prescribe that all television sets shipped in interstate commerce, or imported into the country, shall be able to receive all 82 VHF and UHF channels, provided such power is limited in the way I have described. That is the principle of the Roberts bill. It is not the principle of H.R. 8031, and I oppose H.R. 8031 unless it is amended as I have suggested.

Mr. EDMONDSON. I am appearing to lend my very strong support to legislation of the type represented by H.R. 9267, the Roberts bill, and the companion bills that this committee has under consideration. I oppose H.R. 8031.

And I would just like to comment, if I may, that while my good friend from Kansas may like to think of this as an engineering decision, I was at a meeting in Oklahoma attended by both the Farmers Union and the Farm Bureau and they are in support of the Roberts bill or the Steed bill, as it is known down in Oklahoma. When the Farmers Union and the Farm Bureau get together on something, that is pretty solid policy to follow as far as the farmers are concerned.

Thank you.

The CHAIRMAN. Thank you very much. We are glad to have your statement.

Mr. Kearns, of Pennsylvania?

STATEMENT OF HON. CARROLL D. KEARNS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA

Mr. KEARNS. Mr. Chairman and members of the committee, I would be glad to come back this afternoon, but I do have to go in conference this afternoon on the pension and welfare bill and on the manpower bill. And I appreciate your calling me.

The CHAIRMAN. We are glad to hear you.

Mr. KEARNS. I have a statement which I submitted to all the gentlemen. And I want to say that I and my colleagues on both sides of the aisle up until 3 weeks ago thought that every problem in Washington was vested in the Committee on Education and Labor.

Now I know that you have as many problems as I have. And I say that very honestly, I feel that this committee under your chairmanship and under your ranking members and all the others has to make a great decision. I think it is going to affect the entire community life of America. It is one that is going to be difficult to make. And I would just like to say, in filing my statement, in my opening paragraph I say, I would like to congratulate you and the members of your committee for holding these hearings at this time, and I rest my case with the honorable Members of Congress in this committee.

The CHAIRMAN. I would like to say to you that we are very glad to have your statement and your expression of interest in this program.

(The prepared statement of Mr. Kearns is as follows:)

STATEMENT OF HON. CARROLL D. KEARNS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA

Mr. Chairman, I would like to congratulate you and the members of your committee for holding these hearings at this time. The problem which you are studying is very important and deserves the most careful consideration. I know that you and the members of your committee will give it your closest attention and that your recommendations will be in the best interests of all concerned.

As you know, Mr. Chairman, channel 12 at Erie, Pa., is one of the eight VHF stations which would be affected by the proposed FCC rule. At the present time, channel 12 is providing an important service to citizens of Erie and the surrounding area. In addition, if channel 12 is eliminated, good television reception may be denied to many residents of Crawford, Mercer, and Erie Counties, while others may be required to invest in additional and expensive receiving equipment. Therefore, I am deeply concerned by the proposed rule and the effect which it may have.

My concern is further heightened by the fact that there is good reason to believe that a rule of this type, with its far-reaching effects, is premature. Very possibly, we are being selected as a guinea pig in an experiment which may prove to be unwise and harmful.

It is my understanding, Mr. Chairman, that at the present time the FCC is conducting extensive UHF tests in New York City. The purpose of these tests is to ascertain the extent to which UHF can be received in a large city. To my knowledge, these tests have not been completed and a final report will not be ready for some time. In addition, certain studies are being conducted in an effort to perfect a relay system whereby UHF can be transmitted to areas that are now incapable of receiving a UHF signal. As I have previously indicated, many residents who live in the area immediately adjacent to Erie cannot receive a UHF signal under present conditions.

As you know, Mr. Chairman, hearings have also been conducted in the Senate by Senator Pastore with respect to a bill which requires that all television sets manufactured in the future would have to be all-channel sets. Whether or not this legislation will be adopted is, of course, unknown at this time.

As all of us are aware, long-range considerations appear to indicate that we must make greater use of UHF. Unless we greatly expand the use of UHF television band for both commercial and noncommercial purposes, further growth of our television industry may be curtailed. However, if we are premature in our discontinuance of the VHF stations, many people may find that they are without television reception or that they are confronted with a substantial expense before they are able to receive UHF programs.

I would like to recommend the following solution to this dilemma. Legislation should be enacted which would require that all television sets manufactured in the future be all-channel sets. At the same time, a moratorium should be placed on the FCC's proposed rule at least until the tests which are now being conducted could be completed. We would then have sufficient information concerning the proposed UHF coverage. Also, as a result of the manufacturing requirement, in time the majority of the people who reside in the areas affected by the proposed elimination of the VHF stations would have all-channel sets.

I urge that this proposed solution receive your careful consideration. I believe it is a means whereby progress and scientific advancement can be encouraged while at the same time the rights and interests of the citizens directly affected will be protected.

The CHAIRMAN. Are there any other of our colleagues that will not be able to return this afternoon?

Mr. MACK. My statement will consume probably 10 or 15 minutes. I will be available this afternoon. But I would like to make my statement during the course of the day.

The CHAIRMAN. The gentleman can be recognized now if he wants to, or we can come back this afternoon.

Mr. MACK. Mr. Chairman, for the convenience of the committee I will postpone my statement until this afternoon.

The CHAIRMAN. The committee wil recess until 2 o'clock this afternoon.

(Whereupon, at 12:15 p.m., the committee was recessed, to reconvene at 2 p.m., of the same day.)

AFTERNOON SESSION

The CHAIRMAN. The committee will come to order.

Our first witness this afternoon will be the gentleman from Connecticut, Senator Dodd.

We are very glad to have you on this important subject.

STATEMENT OF HON. THOMAS J. DODD, A U.S. SENATOR FROM THE STATE OF CONNECTICUT

Senator DODD. Thank you, Mr. Chairman and members of this distinguished committee, my purpose in submitting testimony to this committee is to support the general objectives of S. 2109 and to voice strong objection to certain implied ends for which this bill evidently is going to be used by the Federal Communications Commission.

S. 2109 is designed to give the FCC the authority to permit only all-channel television receivers to be shipped in interstate commerce or to be imported into the United States.

The purpose of this bill is to require all manufacturers of television receivers to produce only all-channel sets, that is, sets capable of bringing in the present 13 very high frequency channels and the 70 possible ultrahigh frequency channels. Thus all Americans owning television sets will eventually be able to receive both VHF and UHF channels when presently existing sets are worn out and replaced with new receivers.

Since the use of UHF channels has become technically feasible in recent years, it has been commonly accepted that the addition of these 70 channels to the existing VHF channels would have a salutary effect on the entire television industry. This intermixing of the two broadcasting systems would give the viewer a greater choice of programs than he now has, and present the various stations with a larger degree of competition, thus spurring them on to greater creative efforts.

But S. 2109 as it stands at present is clearly not intended to intermix the two television systems so that they may exist side by side for the benefit of all. There are clear indications that the FCC intends in the future to change the present VHF system to an all-UHF system, and thereby delete existing VHF channels. This deintermixing process will of course be made possible by the gradual changeover to all-channel receivers brought about by the provisions of S. 2109.

Indeed, the deintermixing procedures already have begun. Thus the FCC has for some time inquired into the possibility of eliminating channel 3 in Hartford, without apparent regard for the consequences this would have for the citizens of Connecticut.

Because UHF covers a substantially smaller area than does VHF television broadcasting, impartial surveys were recently conducted in Connecticut and western Massachusetts to determine the effects of the elimination of channel 3 from that area. It was found that serious deterioration of television service would result for almost half a million people in these two States, and that 250,000 people would be unable to receive any television signal whatever if channel 3 were discontinued.

More than 10,000 families, representing over 36,000 persons, have written to the FCC protesting the elimination of channel 3 and urging its retention at Hartford.

Over 250 resolutions from different cities, towns, statewide, and local organizations objecting to the deletion of channel 3 have been submitted to the Commission.

The Governor's Committee for Channel 3, representing approximately 175 government officials, educators, religious leaders, and heads of civic and other Connecticut organizations, similarly has filed comments vigorously opposing the discontinuance of channel 3.

Station WTIC has operated channel 3 in Hartford since 1956, and since its inception has had an excellent record of conscientious public service. It is operated by experienced broadcasters who have consistently cooperated with governmental, educational, civic, and religious bodies in producing features of local and national interest not otherwise available within its service area.

S. 2109 is desirable only insofar as it provides for the manufacture and sale of all-channel television receivers. However, the bill as it stands now may very well be used by the FCC to aid their deintermixing program and eliminate existing channels. The bill consequently should be amended to protect the existing VHF channels against arbitrary elimination by the FCC.

The CHAIRMAN. Thank you for your statement, Senator.

Our next witness this afternoon will be our colleague from Indiana, Mr. Bray.

STATEMENT OF HON. WILLIAM G. BRAY, A REPRESENTATIVE IN CONGRESS FROM THE SEVENTH CONGRESSIONAL DISTRICT OF THE STATE OF INDIANA

Mr. BRAY. I am very happy to be with you here today.

Mr. Chairman, I am appearing here today in the interest of legislation having to do with channel television service.

I have today introduced a bill which is a companion bill to H.R. 9267 and others to promote further development of commercial and educational television on the 70 UHF channels that are now allocated to television at the same time making sure that the existing television service to the American people now provided by the commercial and educational stations operating on the 12 VHF channels is not impaired.

I believe this can be accomplished in the following way:

On the one hand empower the Federal Communications Commission to require that any television receiver shipped in interstate and foreign commerce must be constructed so that it will be able to receive all of the present 12 VHF channels now allocated to television and all of the 70 UHF channels now allocated to television.

On the other hand prohibit the Federal Communications Commission from deleting any VHF channel assignment from any community in the country or from all communities in the country when such action would serve the purpose of or have the effect of making all television stations in any community operate on UHF channels.

Such legislation should limit the FCC's power over television receivers to that necessary to assure the production of all-channel sets, and should make it perfectly clear that the term "all-channel" means the present 12 VHF channels and the present 70 UHF channels and most important of all it should prohibit the FCC from using all-channel receiver legislation as a means of shifting VHF television to UHF—either in individual areas or in a wholesale nationwide shift.

Last year the FCC issued a notice in which it stressed the importance of all-channel receiver legislation in connection with its handling of television allocations matters. But the thrust of that notice was not toward providing for the future development of UHF television in connection with and alongside of VHF television. Rather, the notice contemplates doing away with VHF substantially, if not indeed completely. Thus, in the notice the Commission announced that it was starting proceedings that day to take VHF channels out of eight communities, that it was planning to start similar proceedings in an undisclosed number of other communities, and that ultimately it visualized a television system in which all stations, or almost all stations were UHF channels.

It is clear that the continuation of this policy by the FCC will lead to the complete elimination of VHF stations. UHF stations simply cannot do the job of providing the service to millions of viewers who are outside of heavily populated centers.

We do need to better utilize the UHF channels. If all television sets are built so they can receive both VHF and UHF stations, as my bill provides, the total television service can be increased rather than curtailed.

Although no VHF station in my State of Indiana is now threatened by any of the disclosed specific proposals of the FCC for shift to UHF, I am just as troubled by the FCC's proposal as if the situation were otherwise.

Indiana is now served by television stations which operate on UHF channels. Both UHF stations and VHF stations provide a very valuable service to the public. But neither VHF channels alone nor UHF channels alone could possibly do the job that is being done, and in the future can only be done, not only in Indiana but across the Nation, by stations operating in both frequency bands. Although UHF stations can provide a worthwhile service within the limits of their inherent capabilities, they simply cannot cover the wide areas that can be covered by stations operating on VHF channels. If a VHF station is shifted to a UHF channel, a great number of people

will lose an existing television service and many of these people will lose their only television service.

For the most part, these people would be located in rural areas, on farms, in small and medium-size communities, and in outlying sections. They now get television service because VHF stations in larger, but distant, communities are able to bring the service to them. If this VHF service were taken away, the only way they could get service back would be to build local stations. We all know, however, that television stations take a lot more money to build and operate than do radio stations. It just does not make economic sense to assume that these small and remote and lightly populated areas are going to be able to support their own local stations in order to replace the lost VHF service.

Therefore, if we are to make sure that the public does not suffer loss of television service, we must make sure that VHF stations are not shifted to UHF.

If viewers can choose freely between VHF and UHF stations, then it will be possible for such stations to operate in the same areas. At the same time, those viewers in outlying areas will still be able to receive the stronger VHF programs and will not be denied service as the FCC policy would eventually bring about.

Because television is so very important to the people of this country, and because the FCC's proposals and contemplated action threaten to destroy and to impair this television service, I believe it is essential for the Congress to state clearly that the public interest would not be served by an all-UHF system, but would be served by a system under which the present 12 VHF channels and the present 70 UHF channels operated alongside each other.

I hope the committee will favorably report legislation for this purpose.

The CHAIRMAN. Thank you very much, Mr. Bray. We are very glad to have your statement.

Any questions from members of the committee?

Thank you.

At this time we are glad to welcome our colleague, William W. Scranton.

STATEMENT OF HON. WILLIAM W. SCRANTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA

Mr. SCRANTON. Mr. Chairman, I know you are flooded with witnesses today. If I may, I would be glad to give a short piece of oral testimony, and then submit to the committee in writing a longer statement, if that is agreeable to you, sir.

The CHAIRMAN. You may proceed as you desire.

Mr. SCRANTON. Thank you, sir.

I am here for primarily two reasons: In the first place, the district from which I come and am honored to represent, has a very sizable group of people, approximately 75,000 who, if the Commission goes ahead with their proposal to deintermix the Binghamton area, will result in their having no television coverage. And TV is essential, particularly in rural areas.

My office has been flooded with both petitions and private letters on this particular matter.

Secondly, I am here because I have personally had the experience of both operating and being a part-owner of a UHF television station for many years, until just quite recently. There are a few comments that I would like to make about this.

Essentially, the first question is this, Why should we have UHF at all? And the answer to this primarily revolves around the fact that there are so few VHF channels, only 12 available at the present time, since channel 1 has been reserved. There have been indications from the Federal Government and the Department of Defense, that in the event of an emergency, or maybe in any event, some of these channels which are now available on VHF will no longer be so.

Accordingly, in order to effectuate a sufficient service for the people of the United States, it is necessary to have UHF and to have it be of a serviceable variety.

Why, then, is it not being used? The main reason that UHF is not being used is primarily because of the original "allocation plan" of the Federal Communications Commission after the famous "freeze." In this allocation plan, there were many localities all over the Nation in which there was considerable intermixture of UHF and VHF. This resulted, in turn, in a very unfortunate economic situation for most UHF stations, a great majority of which, as we all know, have now gone off the air because of operating losses in intermixed areas.

For needs and recommendations in this field, let me suggest as follows:

Primarily, there are two needs. In the first place, we should have much greater engineering, research and experimental work for UHF generally, and secondly, particularly in the manufacturing equipment field both for the receiving and the transmitting aspects of UHF.

Because of this, I very much concur in the general thinking behind H.R. 8031, introduced by the distinguished chairman, because this will be a step forward in solving the problem of getting better receiving sets in the UHF field. If it is an obligation of manufacturers to make all-channel sets, obviously they will make some effort to be competitively good and produce a better unit.

On the transmitting side, which is just as important, there arises the necesssity for the Federal Communications Commission to establish more areas where UHF can endure economically. Clearly this is necessary, or else there will be no impetus to produce better transmitting equipment or UHF. But the unfortunate aspect of what the Federal Communications Commission now proposes to do in this field is that they plan to concentrate on deintermixture in rural areas, which is precisely where it should not be, for this reason:

UHF so far has not been developed to the degree necessary to have a strong signal over an area as large as one that VHF can cover. As a result, rural areas, if they are deintermixed and do not have VHF stations, will, instead of having a better situation in television, have a worse one, because they will not have adequate reception in many of the widely dispersed areas.

This is precisely the reason that I object to what they are proposing, and with particular emphasis on the area from which I come, located, as it is, in proximity to the Binghamton station.

This is equally true of other areas, as you know, this deintermixture process.

Accordingly, the point I would like to make here is, besides the necessity of having a better type of receiving set and a more improved transmitting unit, it is necessary to have this done: that the concentration of development in research and experimental work in this field should be where there are very sizable concentrations of population, where UHF has already proved to be successful.

Sir, that is all I have to comment about. If you will allow me, I would be delighted to hand into the committee a longer statement, much along the same line.

The CHAIRMAN. You may file your statement for the record.

Mr. SCRANTON. Thank you.

The CHAIRMAN. It will be received at this point.

(The complete statement of Mr. Scranton follows:)

STATEMENT OF HON. WILLIAM W. SCRANTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF PENNSYLVANIA

I welcome this opportunity to testify before your committee on H.R. 8031, introduced by your distinguished chairman, Congressman Oren Harris, and also on a number of other bills bearing on this subject of VHF and UHF channels.

Specifically, my interest is twofold: first and foremost, a large number of my constituents, particularly in northern Pennsylvania counties bordering on New York State, are alarmed by the Federal Communications Commission's intention of deintermixing the Binghamton area, thus eliminating VHF channel 12 from that area. Second, I have had considerable personal experience in the television field, especially with a UHF installation in the Scranton-Wilkes-Barre area, with which I have been connected for many years, until just recently, both as an officer and part owner.

In all this, the first question is—Why should we have UHF channels for transmitting and public reception at all? The number of VHF channels available is limited to 13, which is not sufficient to meet the need of service for the entire area and population of the United States. Channel 1 has already been reserved and there has been constant indication that in the event of an emergency, other VHF channels would be appropriated by the Government for defense or other purposes. This may happen in due time, even without an emergency (space satellites, for example).

Why, then, if there is a need for UHF is it not being used to the degree that it should be?

The primary reason for this is the Federal Communications Commission's allocation plan instituted after the famous "freeze." The result of this plan was a great deal of intermixture throughout the Nation (UHF and VHF stations in the same markets) and this, in turn, resulted in grave economic difficulties for most of the UHF stations. As a result, an overwhelming majority of the UHF stations went off the air and the private investors suffered severe economic losses. Against VHF stations in most markets, the UHF station is not competitive because of comparative weakness of signal.

To foster UHF and the use of it, primarily two programs are necessary: engineering research and experiments in UHF, and development of better equipment, both for receiving and transmitting.

H.R. 8031, introduced by the distinguished chairman of this committee, is a step in the right direction to assure better receiving sets. If manufacturers include UHF channels on all sets, they will then create the best type of all-channel reception. This should assure far better UHF reception.

To promote more research, experimentation, and better transmitting equipment, the primary need is for the Federal Communications Commission to establish more areas where UHF can endure economically. For the most part, this means all-UHF areas.

Presumably, this is the thinking of the Federal Communications Commission behind their proposal for deintermixture of certain marekts. Most unfortunately, they have primarily chosen markets which cover sizable rural areas. It is precisely in the rural areas that VHF is most needed in order to provide adequate coverage and service for all the people.

One of these areas so designated is Binghamton, N.Y., which directly affects my district, for there are thousands of people in Wayne, Wyoming, Sus-

quehanna, and Bradford Counties of Pennsylvania who are dependent upon the VHF station in Binghamton for all their television viewing.

My office has been deluged with letters and petitions from these constituents who make the point that if the Federal Communications Commission's proposal is made permanent, they will be without adequate television service. Surely, the intention of Congress in approving the Federal Communications Commission Act was to make certain that television and radio service would be available to all the people of the United States. Taking VHF out of Binghamton would deny such service to thousands of people.

UHF has demonstrated that it can successfully cover concentrated areas of population. Accordingly, if the FCC is interested in giving new life to UHF, a desirable move, it should first look for nonrural areas so that no one will be deprived of television service.

The CHAIRMAN. We want to thank you on behalf of the committee for your appearance and for your testimony on this highly important subject.

Any questions by any members of the committee?

Mr. YOUNGER. Mr. Scranton, as an operator of a UHF, are there any UHF stations connected with the network, either NBC or CBS or ABC?

Mr. SCRANTON. First of all, I would like to correct your statement sir. I am not now an operator of one, but I have been. Both NBC and CBS had UHF stations, but they do not have them now. Each had one, if I remember correctly.

Mr. YOUNGER. Do you know whether the UHF can transmit the signal for color television?

Mr. SCRANTON. Yes, it can, sir, and does.

Mr. YOUNGER. Thank you. That is all.

Mr. SPRINGER. I take it that what you have in mind, sir, experimenting with UHF would work far better in cities than it would in rural areas.

Mr. SCRANTON. Well, it is not that it necessarily would work any better in one place than the other, but it would cover the concentration of population that is in a city successfully enough to do a job.

Mr. SPRINGER. The economics of it is sufficient there to survive.

Mr. SCRANTON. Yes, sir; provided you have a total UHF area. It cannot in a large concentrated population—any more than in a rural one—operate in competition with VHF.

Mr. SPRINGER. That is all, Mr. Chairman.

The CHAIRMAN. I have been thinking that somebody was going to come up with the suggestion that you move all VHF out of the heavy metropolitan areas and deintermix it in that way, moving UHF in those areas, and VHF into the more rural areas. I suppose that that suggestion would meet with a great deal of opposition.

Mr. SCRANTON. Well, it is quite clear, sir, that it could not be done to that degree under the present circumstances without eliciting very heavy opposition.

Mr. SPRINGER. Mr. Chairman, may I develop this short point?

The CHAIRMAN. Yes.

Mr. SPRINGER. May I say to the gentleman from Pennsylvania: How long ago was it that you were in the television business?

Mr. SCRANTON. I first started operating a station—partly operating a station—immediately after the freeze, and got out of operating it in 1960, and sold out my interest just a week ago.

Mr. SPRINGER. Let me ask you this: You were operating a UHF station?

Mr. SCRANTON. Yes, sir.

Mr. SPRINGER. Were you in competition with any V's?

Mr. SCRANTON. Only indirectly. Strangely enough, with the very VHF station that they are now planning to deintermix.

Mr. SPRINGER. Did you have a network?

Mr. SCRANTON. Yes, sir; ABC.

Mr. SPRINGER. Now, let me run through this, because I have been living and struggling with this thing since 1953.

Mr. SCRANTON. So have I.

Mr. SPRINGER. In Illinois, we did lose U's, for two reasons, I think. I have come to this conclusion. It is largely due to the fact that they could not compete with a V at that time, but principally because they did not have a network. I do not know of a singe U any place in the Middle West that has gone broke that had a network. The ones that went broke in Illinois and the Middle West were the ones that did not have a network.

I don't know whether a V could survive—if you had three U's, and one had ABC, and one NBC, and the other CBS, and the V did not have anything—I do not know whether a V could survive. But we do have three U's and one V. And my best information is that all of them make money. But I will say that they have all got a network.

Mr. SCRANTON. Well, sir, may I comment on that?

If you ask the Federal Communications Commission for statistics, I am sure they can give you the accurate ones. But there are any number of UHF stations that have gone off the air that did have networks. In the State of Pennsylvania, I can think of five right away. There have been others, a great many others, in other places. This is primarily due to the fact that, as I just pointed out, in heavy concentrated areas of population there is apt to be some overlapping of television, and if there is VHF heavy coverage, it is very difficult for a UHF station to endure even with a network.

Mr. SPRINGER. Well, now, our nearest U is ABC. The U on the other side is NBC. But anyway, they are all showing programs—because I have monitored them all.

Mr. SCRANTON. There is no doubt about it that it certainly helps any station, and it helps a UHF infinitely more if they do have a network. In fact, I would put it this way: except for educational television, or a nonprofit setup of some sort, it is absolutely essential for a UHF station to have a network.

Mr. SPRINGER. Thank you, Mr. Chariman.

The CHAIRMAN. Anything further?

How much area does your UHF station cover?

Mr. SCRANTON. We have 376,000 sets, sir. The area served is about—I am guessing now—about 160 miles in north-south directions, with help of translators, and antenna systems—and about 190 miles east-west, sir. This is with antennas and service systems which help a great deal. This is not from the direct signal. The direct signal itself would cover only about a 60-mile radius at the outside.

The CHAIRMAN. The direct signal will cover 60 miles?

Mr. SCRANTON. Yes; it will, sir. Ours happens to be the most powerful UHF station in the Nation.

Mr. SPRINGER How many watts?

Mr. SCRANTON. We have 1,700,000 watts, with the possibility of 3 million, sir.

Mr. SPRINGER. And the height of your antenna is how much?

Mr. SCRANTON. The actual height above sea level is 2,545 feet, if I remember correctly.

Mr. WILLIAMS. How high above the terrain?

Mr. SCRANTON. About 1,240 feet, sir, if I remember correctly.

The CHAIRMAN. Thank you very much. We appreciate your statement.

Mr. MACK. Before the gentleman leaves, I would like to commend him on his statement, and ask if it is not true that a VHF station, with the same antenna and the same power, would cover a radius of approximately 100 miles?

Mr. SCRANTON. Yes, sir; that is basically correct.

Mr. MACK. Thank you very much.

The CHAIRMAN. Mr. Andrews, of Alabama?

Mr. Grant of Alabama?

Mr. ROBERTS. Mr. Chairman, may I ask that the gentlemen from Alabama be permitted to file statements?

The CHAIRMAN. I was going to state, in case they do not show up this afternoon, both Mr. Andrews and Mr. Grant may file their statements for the record, if they desire.

The CHAIRMAN. Mr. Mack?

STATEMENT OF HON. PETER F. MACK, JR., A REPRESENTATIVE IN CONGRESS FROM THE 21ST CONGRESSIONAL DISTRICT OF THE STATE OF ILLINOIS

Mr. MACK. Mr. Chairman, I do have a statement I would like to make. It is rather a brief statement. I would like to make it at this time.

We have some very disinguished visitors from Illinois who will testify in a few minutes. But I would like to make my remarks now on the bill which I introduced.

Mr. CHAIRMAN. I appear in support of H.R. 9349, which I introduced in September of 1961. This bill represents a slightly different approach from the other bill.

My bill would amend the Communications Act of 1934 so as to clarify the intent of Congress with respect to the authority of the Federal Communications Commission in the allocation of television channels.

Section 307(b) of the Communications Act requires the Commission to make such distribution of frequencies among the several States and communities as to provide a fair, efficient, and equitable distribution of radio service to each of the same.

It is my opinion that it is not necessary to amend section 307(b). I think that the provision today should require and is intended to require the equitable distribution of radio frequencies.

I feel that it is beyond dispute that section 307(b) prescribes a mandate which the Commission should effectuate. It represents a determination by Congress that frequencies shall be distributed so

that each State and community will receive its fair and equitable share.

Unlike some matters over which the Congress has permitted a broad discretion to the Commission, to determine where the public interest lies, Congress has specifically determined the policy deemed to promote the public interest as far as the distribution of frequencies is concerned.

I believe that the Federal Communications Commission disregarded the law and blindly supported deintermixture solely for economic reasons. And in doing this, they have certainly violated the intent of Congress as expressed in section 307(b) of the Communications Act.

My amendment would simply add the following language:

> It shall be unlawful for the Commission on allocating television channels in the very high frequency range, and the ultrahigh frequency band: (1) to give any undue or unreasonable preference or advantage to any particular municipality, locality, or regions; or (2) to subject any particular municipality, locality, or region to any undue or unreasonable prejudice or disadvantage.

My amendment would thus spell out what I contend was the clear intention of the Congress in section 307(b). That such clarification is necessary appears evident from the Commission rulemaking action, seeking to carry out a program of so-called deintermixture of UHF and VHF stations. Actually, deintermixture is nothing more or less than an attempt by the Commission to designate certain areas of the country for either all VHF or all UHF operation.

There is no question about the superiority of the VHF type of television service. VHF stations are capable of serving much larger areas than would be technically feasible for stations operating on UHF channels, since the UHF signal has a much shorter range and certain other undesirable characteristics.

I have before me a letter which was addressed to the chairman of this committee. The main principal proponent of deintermixture conceded in that letter, written by Commissioner Robert E. Lee—and I would like to quote just one sentence from the letter—

> The fact that UHF transmission does not produce equally large service areas with VHF transmission is a conceded fact.

The Commission's proposed order looking toward substitution of UHF channels for VHF channels originally assigned to many communities throughout the United States is therefore clearly discriminatory against the areas designated for all UHF operations.

The evils of this proposed discrimination are compounded by the fact that all UHF territories would comprise many medium sized cities, including several State capitals whose stations serve predominantly rural areas. The big metropolitan centers, where you have the concentration of the population, would retain the superior VHF service.

The Commission, for example, has initiated rulemaking proceedings which would have the effect of making most of Illinois, exclusive of the Chicago area, dependent upon local UHF stations or out-of-State VHF stations. The Commission has proposed substituting UHF channels for VHF channels originally assigned to our capital, the city of Springfield, and Champaign, in east-central Illinois, and to Rockford, in the northern part of the State. The only VHF stations outside Chicago that would be left to us by the Commission, would be those at Harrisburg, in southern Illinois, at Quincy, and Rock Island

on the Mississippi River boundary. Efforts to get Federal Communication Commission approval for a VHF station in Springfield again as early as 1949, but were blocked by the Commission's freeze on all television stations. In 1952, the Commission assigned channel 2 to Springfield, and the following year began a hearing on two competitive applicants for that channel. Before the competitive proceedings were completed, however, the Commission, on March 1, 1957, issued an order transferring channel 2 from Springfield, Ill., to St. Louis.

As a result of a Supreme Court decision in 1958, the Commission's order of March 1, 1957, was vacated. The basis for the action of the Court was the improper and illegal conduct of the St. Louis company which was awarded channel 2, when it was removed from Springfield. Incidentally, this was appealed to the Supreme Court on the basis that they were violating section 307(b). The Court ruled on the ex parte matter before it, without giving a ruling on section 307(b).

As my colleagues will recall, evidence of illegal ex parte representation by the St. Louis interest was developed by our Subcommittee on Legislative Oversight during the intensive investigation of the Federal Communications Commission a few years ago. Unfortunately, despite the fact that channel 2 is still officially assigned to Springfield, the Signal Hill Telecasting Corp. has enjoyed the full use of this channel in St. Louis since 1957, and perhaps may continue to use it until the Commission resolves this problem.

Ironically, this firm is the same firm, with the same individuals, who participated in the ex parte contacts in the course of the Federal Communications Commission proceedings.

Mr. Chairman, this is a deplorable situation. Illinois, with a population of more than 10 million people, has at present only 9 VHF commercial television stations, of which 4 are in Chicago. The Commission, as I previously mentioned, has proposed substituting UHF channels in two of the five cities now having VHF stations. Missouri, with a population of less than half of that of Illinois, has 16 commercial VHF stations, of which 9 are outside Kansas City and St. Louis. In other words, there is a pattern of discrimination, that already is bad enough, that is being made worse by the transfer of channel 2 from Springfield to St. Louis, and complicated further by the transfer of the stations operating in Champaign and Rockford, Ill.

We should consider the public interest question involved in this transfer, as well as the proposed elimination of the VHF stations at Champaign and Rockford. Residents of Illinois, the same as those of every State, are entitled to the best possible television service from stations familiar with their own interests. Certainly the people in the area of our capital city of Springfield should be able to get news about the Illinois government, about Illinois sports, and about Illinois activties of all sorts from a station within our own State.

We should act now to prevent the Federal Communications Commission from going any further with this deintermixture program which discriminates against many medium sized cities and the rural areas of our country.

Enactment of my bill will make crystal clear to the Commission that the Congress wants a fair, efficient, and equitable distribution of the radio-television spectrum.

The airwaves are a great natural resource, belonging to all of our people; the Congress, in my opinion, has a responsibility for seeing to it that they are used in the best interest of the people of this Nation.

I might say that if the deintermixture proposal is successful, the people of Illinois will be forced to listen to stations in Missouri and in Indiana. The VHF signals from the Missouri side at St. Louis and from the Indiana side at Terra Haute almost cover our entire State. All of the national advertising income will go into the VHF stations along our borders. Illinois will be denied not only this preferred service, but will be denied economic revenues that they are justly entitled to.

I believe that this Congress and this committee has a responsibility to act in this field. I feel that we should certainly clarify the intent of Congress which was to give equitable distribution of our radio frequencies.

I thank you, Mr. Chairman, for this opportunity.

The CHAIRMAN. Thank you, Mr. Mack.

Our next witness is our colleague, Mr. Thomson.

You may proceed.

STATEMENT OF HON. VERNON W. THOMSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WISCONSIN

Mr. THOMSON. Mr. Chairman, members of the committee, I am very pleased to have the opportunity to appear before this committee in support of the bill by our colleague, Mr. Roberts, H.R. 9267, and similar proposals which would condition all-channel receiver legislation to prohibit the FCC's deletion of any established VHF channel or its involuntary shift from the VHF to the UHF. I am also appearing in support of my pending resolution, H. Res. 450, which would postpone any FCC reallocation of operative VHF channels until it has at least completed its experimental study of the general effectiveness of VHF telecasting for which this Congress has previously provided a $2 million appropriation. Just as there is no local or regional issue of greater significance to my constituency than the matter of retaining its existing and needed TV service, so I think that this committee's hearings on the matter of television reallocations are of consummate importance to the public interest in general, as well as to those areas whose existing TV service is being threatened with extinction by pending FCC proposals for deintermixture.

I listened with interest to the Congressman from Illinois who said he had called some meetings in his district to discuss the question of deintermixture. I found I did not have to call any meetings on that subject in the district I represent. I visited 120 communities, a coverage as broad as the definition for the Department of Urban Affairs—that is, all communities whether incorporated or unincorporated. It was the primary concern of the people in those areas who live as close as 30 miles to the city of Madison, where the UHF stations were located—if they live back of a bluff or in a valley or behind some other natural obstruction, they just could not get the UHF signal. The area that I represent are the 10 counties in the southwest part of the State, which is unglaciated, and it consists of high hills and deep valleys. I do not think a system of boosters would be of

any advantage to that area. The only signal they can reach is a VHF signal.

My constituency consists of 10 counties in the area west of the city of Madison, whose aggregate populations total approximately 300,000 people. As I stated in my comments to the FCC of February 19, 1962, in opposing its contemplated deletion of Madison channel 3:

> Almost all of these people would in one related way or another be most closely and adversely affected by the Commission's proposal to reallocate Madison channel 3. For, in essence, it would deprive them of the television service presently being provided to them on that frequency * * * (which) is the only regular and reliable TV service of any kind received by many tens of thousands of people of my constituency * * *.

If they take out channel 3, those farmers could not receive the farm hour program which is tremendously popular in that area, and they could not receive the football telecasts of the Green Bay Packers' football games. And I want to say to you gentlemen that that would be just as serious in Wisconsin as it would to black out Arkansas and Louisiana and Alabama during the bowl game on the 1st of January.

The CHAIRMAN. It is pretty serious.

Mr. THOMAS. It is very serious, Mr. Chairman. Since I am in general sympathy with the FCC's goal for fuller development of UHF television service in the United States—to the same extent that it has already been developed in the Madison, Wis., area—I support the basic principle of congressional legislation requiring television sets to be capable of all-channel reception. For several compelling reasons, however, I believe that such legislation must be expressly conditioned by congressional limitation of the FCC's power to preclude its forcing the involuntary shift of operative VHF channels to UHF or deleting these VHF channels. Such a limitation on FCC authority is quite consistent with such all-channel legislation and the intermixed television system—with VHF and UHF in the same cities—which such legislation seeks to achieve.

Deintermixture, on the other hand, is completely contrary to and destructive of the purposes of such all-channel legislation and the intermixed system it would achieve in other cities as has already been achieved in cities such as Madison with both VHF and UHF stations. In addition, deintermixture would cause grave loss of existing TV service to farm and rural areas around Madison, and apparently around the seven other cities as well, which are similarly marked for deletion of their only VHF. Such service losses must total into the millions, for they amount to the hundreds of thousands of viewers in the Madison area alone. For this reason, I support the so-called Robert bill, H.R. 9267, and other similar pending legislation which would condition the requirement for all-channel receivers with a congressional prohibition on FCC deintermixture of existing VHF channels.

I further believe that this committee should support my own pending resolution H. Res. 450 which I introduced in late August of 1961 just after the FCC had proposed the deintermixture of Madison and seven other cities. I think it was the first outcry in Congress against this discrimination against rural America.

While I believe that H. Res. 450 would make an important contribution to meaningful agency treatment of the deintermixture question, I note that passage of the Roberts bill (H.R. 9267) or similar

legislation would effectively preclude any and all FCC deintermixture action and so would make moot H. Res. 450. In current circumstances I believe that passage of legislation such as H.R. 9267 may be the preferable course for congressional treatment of the problem. On the other hand, should such legislation not be passed, then I would strongly urge congressional adoption of H. Res. 450. With it the FCC would at least be required to complete its New York UHF experiment for which Congress appropriated $2 million before the agency seeks to venture into the unknown by destroying existing and needed VHF service which cannot be replaced by the UHF about which the Commission has such severe doubts and seeks further information. The Congress should not permit any administrative agency to take such a costly and destructive gamble with vital television service.

As should be evident to this committee, I feel very strongly in all events that the FCC should deny its proposed deletion of Madison channel 3. So to formally express my position, I have filed extensive comments with the FCC in its Madison deintermixture docket 14239 as well as in its general rulemaking proceeding docket 14229 which appears to have some interrelationship with the particular Madison proceeding in inquiring generally into the matter of "selective deintermixture" which it there seeks to be applied in eight cities, including Madison. My comments of February 19 to the FCC strongly opposing deletion of Madison channel 3 are equally applicable to my position before this committee calling for a limitation on FCC authority to commit what I believe to be an act of administrative folly.

Accordingly, I am submitting to this committee copies of my comments to the FCC which I request be considered as part of my formal statement to this committee. I would further call this committee's attention to some attachments to those comments which relate to and support my own pending resolution, H. Res. 450. These consist of a statement made by me on the floor of the House on August 31, 1961, in introducing H. Res. 450, together with my letter to the Honorable Oren Harris, chairman of this committee, of October 16, 1961, further commenting on the basis for that resolution. I believe that these statements are compelling and self-evident demonstrations of the necessity for congressional adoption of the proffered resolution if it does not adopt the indicated legislation substantively restricting the FCC from any deintermixture action.

In closing I would like to add some brief reference to the unique allocations situation and history of Madison, Wis. That city now has four television stations—three commercial, including the one VHF, as well as an educational outlet. And that is at the University of Wisconsin.

These UHF's have been on the air since 1953 and there is complete UHF set saturation within the area served by these UHF stations. These local UHF's and the VHF make Madison an effectively intermixed market of precisely that kind the FCC purportedly would like to see established everywhere in the United States through the medium of the all-channel receiver legislation. Thus the people of Madison and its immediate area already enjoy multiple television services, just as do their counterparts in other urban areas of the country which may have as many as 10 TV services. In contrast,

however, the outlying rural and agricultural areas from Madison can enjoy only limited service. Madison channel 3 is for the most of them their only regular and reliable TV service and at least the only one of the two services which they are able to receive. There should be no administrative destruction of this vital service, particularly on the discriminatory basis as now proposed by the FCC. It is for this reason that there has spontaneously arisen in this outlying Madison area a local voluntary group called The Committee to Preserve Rural Television in the Madison, Wis., Area. This voluntary committee of public-spirited citizens has in a short space of time, and despite obvious limitations of personnel and funds, already collected almost 32,000 signatures on over 1,150 petitions from people in the area calling upon their congressional representatives as well as the FCC to preserve the "existing and vitally needed television service on Madison channel 3." It has also been instrumental in obtaining governmental resolutions opposing reallocation of Madison channel 3 from the State legislature, 13 county boards affected in this area passed resolutions, 24 cities passed resolutions, and at least 37 towns and villages in the area also passed resolutions opposing the deletion or the deintermixture of channel 3.

This local committee has likewise prepared and filed comments before the FCC opposing reallocation of Madison channel 3. I am submitting, together with my own comments, a copy of the formal comments to FCC of this local committee which I believe will be of particular interest to this committee in showing the force of local public opinion arrayed against any Madison deintermixture.

Thank you, Mr. Chairman, and members of this committee, for the opportunity to appear before you concerning the pressing needs of my constituency. I am confident that this committee, as well as the Congress, will take such action as is demonstrated to be in the public interest to protect the people of my constituency and the Madison area from being deprived of the service of the most powerful medium of communications which man has yet devised.

The CHAIRMAN. The material you have referred to will be included in the record at the conclusion of your statement.

Mr. THOMSON. Thank you, Mr. Chairman.

(The documents referred to by Mr. Thomson are included with a letter to Chairman Harris which appears on p. 538.)

The CHAIRMAN. At this time we will hear from Mr. Roberts.

STATEMENT OF HON. KENNETH A. ROBERTS, A REPRESENTATIVE IN CONGRESS FROM THE FOURTH CONGRESSIONAL DISTRICT OF THE STATE OF ALABAMA

Mr. ROBERTS. Mr. Chairman and members of the committee, I would like to say that it is not my purpose to burden the committee at this time, but in recognition and in confirmation of what the chairman said this morning, I think that this subject is one of extreme importance, as has been stated by many of the witnesses who have appeared here today.

It was in recognition of the importance of television to the people and of the responsibility of the Congress that I introduced H.R. 9267

last September. Rather than present a detailed statement about the bill now, I would like, at this time, merely to summarize briefly the purposes of H.R. 9267 and the manner in which these purposes would be achieved.

H.R. 9267 is designed to make possible the further development and expansion of both educational and commercial broadcasting by removing an obstacle which for most of the last decade has stood in the way of greater utilization of the 70 UHF television channels. That obstacle has been lack of production and distribution of television receivers that can receive both VHF and UHF channels.

At the same time, H.R. 9267 is designed to protect the people against the loss of the existing VHF television service upon which they now depend and must continue to depend. The people are threatened with loss of VHF service and many are threatened with loss of all television service by proposals of the Federal Communications Commission to shift VHF stations to UHF channels.

To achieve its purposes H.R. 9267 does several things:

1. H.R. 9267 would give the FCC power to require that all television sets shipped in interstate commerce or imported into the United States must be capable of receiving all channels allocated for television, including present VHF channels 2 through 13. As I understand it, this is the same power which the FCC seeks in H.R. 8031, which Chairman Harris introduced at the FCC's request, although the language of H.R. 8031 does not expressly mention channels 2 through 13. By assuring production and distribution of all-channel sets, we will make it possible in due time for those who see a need for new stations to put UHF stations—commercial and educational—on the air with assurance that the people will be able to see and hear their programs if they are interested in doing so. Thus, the orderly development of television on the 70 UHF channels would be made possible without in any way adversely affecting the existing VHF television system.

2. H.R. 9267 would give the FCC the power to prescribe maximum performance capabilities for television receivers to the extent appropriate to assure that all sets are capable of receiving all television channels, including channels 2 through 13. In other words, H.R. 9267 would not give the FCC power to require, for example, that all sets be color sets, or have a certain size picture tube, or be made with a certain size speaker, or have a built-in antenna, or have remote-control tuning, or have knobs on the side, and so forth. The FCC's power over sets would be limited to their ability to receive all channels. Thus, H.R. 9267 would involve the minimum Government intervention in set manufacturing necessary to achieve the very important public interest goal of all-channel receiver distribution. In its present form, the Commission bill, H.R. 8031, does not narrowly limit the FCC's power over receivers. However, I understand that in the hearings before the Senate Subcommittee on Communications 2 weeks ago the FCC recognized that its power to prescribe minimum performance capabilities should be limited only to the all-channel capability aspect.

3. H.R. 9267 would prohibit the FCC from shifting VHF television stations to UHF channels, either on a case-by-case basis or as a part of an overall shift of all or a substantial part of all television to UHF.

The Commission bill, H.R. 8031, is silent on this point. I have no doubt that all-channel set legislation should include this prohibition against shifts of VHF stations to UHF. It is axiomatic that television should not be taken away from people, and particularly people in rural, farm, outlying, and smalltown areas who have, if anything, a relatively greater dependence on television than people in big metropolitan centers. Yet this is exactly what shifting VHF stations to UHF would do. For example, if channel 12 were taken away from Montgomery in my State of Alabama, as the FCC has proposed, and if WSFA–TV were shifted to UHF, more than 50,000 people would be left without any grade B television signals and more than 140,000 other people would be cut back from 2 Grade B signals to 1 Grade B signal. We in the Congress must protect the people against these losses of television.

It may be contended that there is no relationship between all-channel receiver legislation and shifts of VHF stations to UHF. I cannot agree. The fact remains that the FCC has left no doubt that it regards an all-channel set law as a means of helping it to shift either some or all VHF stations to UHF. H.R. 9267 would assure that these shifts could not occur.

I recognize that H.R. 9267 would limit to some extent the power of the FCC to change television channel assignments. I intend this to be the case in connection with shifts of stations from VHF to UHF. However, H.R. 9267 would not stop the FCC from shifting a station from one VHF channel to another VHF channel as it did with a Rochester station last summer, for example. It would not stop the FCC from taking a VHF channel away from one licensee and giving it to another in the same community if such action otherwise would be in the public interest, as it did with a station in Miami last year, for example. It would not stop the FCC from moving a station from one community to another as it did when it added a station to Little Rock a few years ago, for example. And it would not stop the FCC from adding a new VHF channel to a community as it did in Syracuse, Rochester, and Grand Rapids last year, for example.

Because VHF television is so important to the people, and because of the harm the people would suffer from the shifts of VHF stations to UHF, I have no doubt that the limitations on the FCC's power involved in H.R. 9267 are completely justified in the public interest and do not unnecessarily tie the FCC's hands in connection with making frequency assignments. Since the FCC is an arm of the Congress, in a matter as important as VHF television service to the public it is perfectly appropriate, indeed it is essential, for the Congress to withhold from the FCC power to shift VHF stations to UHF.

Mr. DOMINICK. Mr. Chairman, may I ask the gentleman some questions?

The CHAIRMAN. Yes.

Mr. DOMINICK. Mr. Roberts, I have been listening with great interest to this. I have written several letters to the Federal Communications Commission which are part of the record in 14229.

It seems to me that most of the witnesses are in general agreement that VHF signals and programs that are broadcast over them become available to a wider group of people and are better competitively than UHF are, particularly in mountainous and wooded country, such as my own State.

Now, if this is true, and if in the situation which we have in my State, and I am sure is true in others, where there is an available UHF spectrum which could be used, and which no one will apply for or make use of, are we not in effect saying that we are going to force use of UHF and that by requiring that all receivers must carry UHF, are we not laying the basic background for saying at a later date that we are going to require that these spectrums be used, and that if it is an uneconomical thing from an advertiser's point of view, that the Government is going to have to come in and do this?

Mr. ROBERTS. Well, I think that the question of economy would be pretty well settled at the hearing when the licensee makes his application. I think he would have to establish economic feasibility before the Federal Communications Commission would grant the license.

Mr. DOMINICK. Under the proposed rulemaking that the Federal Communications Commission put out last July, it says they are simply going to give a UHF frequency to any qualified applicant on a first come, first serve basis, without comparative hearings or anything else.

Mr. ROBERTS. Well, I am not too familiar with that aspect of the Commission's rulings. But I would say this: I would think that a licensee applying for a channel would certainly want to feel that he had a proposition that was economically feasible. I do not think that the Federal Communications Commission ever guarantees that you are going to make money out of a given proposition. But I think you should pretty well leave that up to the judgment of a good businessman as to whether or not he applies for the channel.

Mr. DOMINICK. If we pass this bill to provide that all receivers must carry UHF reception facilities, and no more UHF stations were applied for, because they are uneconomical, are we not simply adding to the cost of the television viewers of this country?

Mr. ROBERTS. I think in any event, that any additional cost that is present in the set by virtue of its being an all-channel set is going to be passed on to the consumer anyway. I cannot believe the manufacturer is going to lose money on the set.

Mr. DOMINICK. I know. I may not have made my question clear. The point I was trying to make is this:

As far as I can see, there is not much point in requiring all receivers to carry UHF facilities unless there is going to be a decided increase in UHF transmitters. If they are not economic, then why should there be any increase in UHF transmitters?

Mr. ROBERTS. Well, I do not know that I can answer that question, as to whether it is going to be economical or not. I agree with some here that there should be more studies besides the one in New York, and I certainly feel we should not allow the Federal Communications Commission to delete these VHF channels until the results of that one study are made known. I see no point in spending $2 million of the taxpayers' money and not waiting for the results of that study.

Mr. DOMINICK. I agree with that.

Mr. ROBERTS. Now, if it develops that UHF is feasible for big, metropolitan areas, then you are going to have the question of whether or not there should be consideration given to a replacement of VHF signals with UHF in the metropolitan centers. I certainly do not think that the rural areas of the country, and this action of the Com-

mission is apparently beamed at centers of 200,000 or less, should go through as the Commission is attempting to put it through, without consideration of the other factors that you mention.

I might say that I am not nearly so interested in seeing that all receivers are equipped to receive all the channels as I am in seeing that the existing VHF channels are not deleted on the scanty evidence that the Commission has before it at the present time, on a geographic basis.

Mr. DOMINICK. I would just like to add here, if I can, that in our own State, on the western slope in particularly, where in our mountainous areas the local communities have spent a lot of money putting in boosters and relays in order to pick up VHF stations which are located in the Denver metropolitan area, two in Colorado Springs, one in Pueblo, one in Grand Junction, and one in Montrose; now, if these are replaced with UHF, those boosters and relays which have been put in are not going to be effective in picking up this signal and transmitting it, so that all the money that has been put in by the local communities will be completely wasted, and there will be a large number of communities in our area that simply will not be served at all.

It seems to me that the proposal that the Federal Communications Commission has put in, which will apparently require that VHF be replaced by UHF all over, is simply going to be detrimental to the interests of the entire State. I am sure this is true in every other mountainous State in the country.

Mr. ROBERTS. I think that this proposal of the Commission is a kind of "heads we win, tails you lose" proposition. I cannot see how you can say to people that we are going to have a VHF signal and replace it with a UHF unless you can say the trade you are offering people is as if you, "Well, we are going to replace your high-speed automobile for a horse and buggy." That is about what it amounts to.

Mr. DOMINICK. Thank you.

Mr. MACK. Will the gentleman yield?

This is the first time that I know of in the history of Federal regulation where a commission has arbitrarily selected communities and very flatly stated that these communities shall have inferior service. In all other cases with which I have been familiar they have decided contests among communities, or among applicants for station licenses, on the basis of which could best serve the public interest.

It seems to me that the deintermixture procedure is a completely reverse approach, they are arbitrarily selecting the communities which shall be denied first-class television service.

The gentleman mentioned the difficulty of picking up UHF signals in mountainous terrain. That difficulty is found in every section of the country. UHF service is inferior to VHF. I think that every conscientious engineer in the country will agree to that.

The CHAIRMAN. Well, I wanted to inquire of the gentleman, since he did make a comment with reference to the language in the bill H.R. 9267, whether you interpret it as taking from the Commission the authority to transfer a station from one community to another community. I would say to the gentleman from reports and information that I have had from lawyers who have looked into it, they are fearful that the language in the bill does give such authority to the Commission.

I know the gentleman has the best intentions with the language as well as the explanation of the bill. But I do want to respectfully suggest that the language be more carefully analyzed from that viewpoint. I know you would not want, as I would not want, language to permit something when you would think it does not permit such a thing.

At the proper time, when we do have time, I will be glad to go into that with the gentleman with a view toward getting it clarified.

Mr. ROBERTS. I appreciate the concern of the chairman. I would like to say this: I recognize that the chairman is a good lawyer. I have talked to some lawyers about this. They believe this would allow shifts within communities within the VHF channels, but would not allow the replacement of existing VHF channels with UHF channels.

The CHAIRMAN. Well, I say, I am sure that is what the gentleman did intend. But I am fearful that the language in the gentleman's bill, and many others that are identical, would do otherwise.

As an example, we had the two gentlemen from Oklahoma here this morning who testified about the situation that they have there. There happens to be within that Oklahoma area a different situation, where they all want to transfer a VHF station to one of the metropolitan areas. I am thoroughly convinced that if this language was included in the law, that could not be done, even if it was agreed to by everybody.

There was a situation in Fresno where deintermixture was brought about by agreement with everyone, so I am told. I am of the opinion that the Commission could not permit such an interchange even if it was felt desirable by those who were interested, including the public.

I think those are things that I would suggest that you give consideration to in the language. I recognize it is technical. The whole thing is technical. Sometimes I do not think I know anything about it, either. But we do want to give consideration to the effect of this, as well as any other bill, even the one that the Commission sent up here, which in my judgment goes too far, I mean it is too broad, it does not pinpoint it, as many witnesses have testified. I think whatever we do we are going to have to try to frame the language, to accomplish the purposes that so many people want accomplished.

Mr. Dominick, do you have any further statement?

Mr. DOMINICK. No, sir.

The CHAIRMAN. Your name is down here.

Mr. DOMINICK. Well, if it would be all right with the chairman, what I would like to do is include in the record the letters and the answers which I have received from the Federal Communications Commission on 14229.

The CHAIRMAN. The gentleman may have that privilege.

(The letters referred to follow:)

STATEMENT OF HON. PETER H. DOMINICK, REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO

Mr. Chairman and members of the committee, I have no formal statement on these bills but have been interested in them since last fall when several of my constituents started questioning the proposed new FCC regulation in FCC docket 14229. Following investigation and study of the proposed regulation, I wrote to the Chairman of the Commission, Mr. Minow, and subject to your approval I submit copies of this exchange of correspondence as part of my statement.

As is evident from this exchange, I find it very hard to support logically a rule which results in additional expense to the television public, to the broadcasters, to the manufacturers and a probable loss of television service in many areas solely for the purpose of assisting a noncompetitive and uneconomic method of transmission. I also find it difficult to swallow any bill which would promote the objects of such a rule and I am very afraid that the proposed bills will do at least that. H.R. 8031 goes even further and would in effect make all matters pertaining to the manufacture of television receivers the concern of and under the control of Congress.

JANUARY 4, 1962.

Hon. NEWTON C. MINOW,
Commissioner, Federal Communications Commission,
Washington, D.C.

DEAR MR. MINOW: It is my understanding that the FCC is contemplating rule changes under which existing VHF television stations will be given 5 years of transition with both VHF and UHF channels. It is difficult to see any reasons for this unless the eventual purpose is to shift television transmission from VHF to UHF.

I have discussed this with a number of people in the television industry as well as a number of prominent people in other businesses in the western area of the United States. It appears as though any such action at least as far as the West is concerned would have the effect of eliminating TV coverage in a great many areas, particularly in the more mountainous country, would render useless most of the TV receivers in the area without substantial expensive modifications and would result in far poorer reception in the areas where the signal would be received at all.

I have great difficulty in determining the necessity for this action particularly without a full congressional hearing. I can understand that in areas which are presently covered partly by VHF and UHF you may want to consolidate the two transmission systems in order to avoid interference, but where this is not true as well as in areas where UHF channels have been available for some time but are not being used because of inability to compete with VHF, this reason goes out the window.

I would appreciate any comments which you may care to make on this in order to clarify the problem. In the event that action is proposed in the near future by executive action of the FCC, I intend to urge Chairman Harris of the Interstate and Foreign Commerce Committee to hold full hearings to determine the impact which such action will have on the industry and on the public for purposes of developing corrective legislation.

Very truly yours,

PETER H. DOMINICK,
Member of Congress.

FEDERAL COMMUNICATIONS COMMISSION,
Washington, D.C., February 1, 1962.

Hon. PETER H. DOMINICK,
House of Representatives,
Washington, D.C.

DEAR CONGRESSMAN DOMINICK: Thank you for your letter of January 4, 1962, which I have had placed in Docket No. 14229 so that it may be considered by all members of the Commission.

I am enclosing a copy of the Commission's Notice of Proposed Rulemaking in this docket, which expresses the reasons for the Commission's view that expanded use of the UHF television band is badly needed. Although almost all American homes are within range of some television service, only 65 of the television markets in the United States were served by three or more competitive local television outlets in June of 1961. Many communities which could easily support three or more local stations have but one or two; many others, whose needs for local television facilities are entitled to the fullest consideration, have none.

It appears possible to support at least three nationwide network services. But there remain substantial areas where the full range of entertainment, information, instruction, and stimulation which the existing networks offer simply cannot be funneled through one or two station outlets. There are even more areas where the paucity of stations acts to deprive the public of a full choice between network and nonnetwork programs. Given the present number of stations, the

economic base for the establishment of any more commercial networks simply is not present. To complete the picture, noncommercial educational television is available in only a relatively few communities. A nationwide educational television network, with all it could mean in the exchange and distribution of high quality educational programs, is still a dream, not a reality.

The 12 VHF channels, which constitute the base of the present system, are wholly inadequate to meet the needs of a growing Nation. Moreover, for the foreseeable future, it cannot be expected that additional space for television in the VHF portion of the radio spectrum can be found. In grappling with this problem, another blunt truth must be faced. In present circumstances, commercial UHF stations cannot compete with VHF stations on anything like an equal basis. This stems largely from the greater coverage provided by VHF stations under the present state of the art.

Given these facts, it is apparent that, absent some radical transformation in the technological base of our television system, there are but two long-range solutions. One is the shifting of all television to the UHF portion of the spectrum, where there is hopefully room for all to compete on an equal basis. The other is to find ways and means of making the present, hybrid VHF–UHF system workable. Both of these solutions necessarily involve a greatly expanded use of the UHF frequencies. A situation in which only 75 of the 1,543 UHF channel assignments are in current use represents an intolerable waste of a precious national resource.

Having arrived at this conclusion, the Commission moved forward. Last July, it combined a number of existing proposals with several new and significant ideas, to form a multiphased program aimed at getting the maximum use out of the VHF television band while lowering barriers to the expanded use of UHF. Although this letter does not attempt to describe all of the steps that were proposed, your attention is particularly directed to the proposal that Congress authorize the prohibition of the shipment in interstate or foreign commerce of television receivers which are incapable of receiving all television channels. It might also be pointed out that part of the program consists of proposals to add third VHF channels at substandard spacings to certain major markets which presently have two VHF stations and in which the addition of a third VHF station would not impinge significantly upon existing UHF service.

In the overall program, the "deintermixture" of certain areas, through the substitution of UHF for VHF channels, plays an important role. These areas were selected because there is but one commercial VHF station operating in each because it appeared that there were considerable numbers of receivers in the hands of the public of these areas which are capable of using UHF signals, and because it appeared that the UHF service areas of local stations would be sufficiently free from competition from outside VHF stations to promise a meaningful improvement if local competition were made all-UHF.

Would removal of VHF competition enhance substantially the chances for fuller use of the UHF channels available in the area? The Commission thought the prospects worthy of serious consideration. At the same time, it is not unaware of the price which might have to be paid. The extent to which members of the public might be required to convert their sets in order to receive UHF signals was one of the primary factors in selecting areas to be "deintermixed." And the question of whether differences in coverage between the UHF operation proposed for each of the eight areas involved and their present VHF operation might permanently deprive some residents of outlying areas of service is of course vital in any ultimate determination we make.

It is with considerations of this sort in mind that the Commission will evaluate the comments which it has invited. The problems can only be met by a careful exploration of the material facts and an evaluation of those facts in the light of its responsibilities. You may be assured that the Commission's best efforts will be devoted to that end. As indicated in paragraph 5 of the enclosed notice of proposed rulemaking in docket 14229, this proceeding does not propose that all television be shifted to the UHF portion of the spectrum. Though this may eventually be found to be feasible, expanded efforts must now be made to encourage fuller utilization of the UHF channels.

Sincerely yours,

NEWTON N. MINOW, *Chairman.*

FEBRUARY 8, 1962.

Hon. NEWTON N. MINOW,
Chairman, Federal Communications Commission,
Washington, D.C.

DEAR MR. CHAIRMAN: I have your letter of February 1 replying to my letter of January 4 concerning docket No. 14229 but I have considerable difficulty in following its logic. At one point you state that the present economic base is sufficient to support the three nationwide network circuits but not sufficient to support four and that most American homes are presently receiving television service. You then go on to state that the 12 VHF channels constituting the base of the present system are "wholly inadequate to meet the needs of a growing Nation." As a solution you propose to change to a UHF system which will give poorer signals, cover smaller areas, require a great additional expense on the part of existing television stations and substantial additional expense on the part of all viewers in the modification of their sets. Apparently this is to be accomplished for the sole purpose of increasing competition, but according to your letter and my own information any such increased competition would be uneconomic in a great many localities.

It is not clear to me whether or not you refer to all of Colorado as one of the 65 markets served by three or more competitive local television outlets or whether you refer to only Denver itself. A breakdown showing the extent to which the Denver stations serve the balance of Colorado directly and by boosters would be most helpful in my thinking concerning this problem and a similar breakdown for the other areas would be of considerable interest to me in our study of the problems in the Interstate Committee.

I do not want to be misunderstood in this letter. I am not opposing the development of UHF where it fits in a community but it does strike me that an Executive order requiring an area adequately served at the present time to be reoriented to a wholly different system at added expense to all parties concerned is far from desirable.

Very truly yours,

PETER H. DOMINICK, *Member of Congress.*

FEDERAL COMMUNICATIONS COMMISSION,
Washington, D.C., February 27, 1962.

Hon. PETER H. DOMINICK,
House of Representatives,
Washington, D.C.

DEAR CONGRESSMAN DOMINICK: In reply to your letter of February 8 concerning docket No. 14229, first let me reiterate that our main concern is the realization of a system of competitive nationwide and local television services reaching all portions of the country with the largest possible number of program choices and competing outlets of local expression. We have decided that the best way to reach this objective is to expand the use of the existing hybrid system of UHF and VHF channels and this is why we have so strongly urged the passage all-channel receiver legislation. It is true that in some area we have of all-channel receiver legislation. It is true that in some areas we have proposed to change to all UHF because of the competitive situation and a desire to bring three services to the cities involved. However, we will take a very careful look to see what effect this would have on the rural areas as a result of the lesser coverage of UHF stations.

With specific reference to the State of Colorado, we make no proposal to change any station to UHF. In mentioning the 65 markets served by three or more competitive local television outlets, we do not refer to States, but to cities. Denver is one of these markets. As far as the coverage of the four stations operating in Denver is concerned, the only information we have is that supplied with their applications which indicates that they cover roughly about 60 miles out in the directions in which they have line of sight. I am attaching a list of these stations and the authorized repeaters as of February 9, 1962, which are rebroadcasting their programs in Colorado.

As far as the other 64 markets served by three or more local television outlets are concerned, we do not have lists of repeaters by cities and running down this information would be extremely difficult. I trust therefore that the information concerning Denver will suit your purposes.

Sincerely yours,

NEWTON N. MINOW, *Chairman.*

81657—62——6

Denver, Colo.

Television station	*Areas where authorized repeaters are rebroadcasting station*
KTVR (channel 2)_____	Grand Lakes.
KOA–TV (channel 4)____	Aquilar; Akron; Alma; Aspen; Avon; Eagle; Edwards; Bypsum; Wolcutt; Axial Basen Rural Area (Moffat County); between Cabin Creek and Dotsero; Blue River Valley; Williams Fork; Bond; McCoy; Breckenridge; Buena Vista; Craig; Craig North Rural; Maybell; Cripple Creek; Crook; Fleming; Glenwood Springs; Grand Lake; Gunnison; Hamilton; Haxton; Hayden; Hot Sulphur Springs; Leadville; Minturn; Gilman; Oak Creek; Yampa; Otis; Peetz; Phippsburg; Red Cliff; Camp Hale; rural area between Derby, Mesa, and Bond; Sargents; Steamboat Springs; Yampa Valley Rural; Yuma.
KLZ–TV (channel 7)____	Breckenridge and Blue River Valley; Leadville; Sterling; Victor.
KBTV (channel 9)_____	Akron; Colorado River Valley; Sheepshor area; Leadville; Minturn; Gilman; Sterling; Victor.

Mr. ROBERTS. Mr. Chairman, I did not request the Chair to allow me to file my formal statement. I would like to ask unanimous consent. I briefed it. I would like to file the full statement.

The CHAIRMAN. Very well—in addition to the one you read?

Mr. ROBERTS. Yes, sir.

The CHAIRMAN. You may have that privilege.

(The full statement of Mr. Roberts follows:)

STATEMENT OF HON. KENNETH A. ROBERTS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALABAMA

Mr. Chairman and members of the committee, the hearings that we are beginning today are extremely important. They underscore two facts that must be kept uppermost in our minds. First, television plays a vital role in the daily lives of our people. Second, the Congress is responsible for assuring that the people do not lose their present educational and commercial television service and that adequate provisions are made to allow for further development and expansion of both educational and commercial television for the benefit of the people in the years to come.

It was in recognition of the importance of television to the people and of the responsibility of the Congress that I introduced H.R. 9267 last September. Rather than present a detailed statement about the bill now, I would like, at this point, merely to summarize briefly the purposes of H.R. 9267 and the manner in which these purposes would be achieved. Perhaps this will help place the issues sharply in focus before we hear from the many distinguished persons who are scheduled to appear before us this week.

H.R. 9267 is designed to make possible the further development and expansion of both educational and commercial broadcasting by removing an obstacle which for the most of the last decade has stood in the way of greater utilization of the 70 UHF television channels. That obstacle has been lack of production and distribution of television receivers that can receive both VHF and UHF channels.

At the same time, H.R. 9267 is designed to protect the people against loss of the existing VHF television service upon which they now depend and must continue to depend. The people are threatened with loss of VHF service and many are threatened with loss of all television service by proposals of the Federal Communications Commission to shift VHF stations to UHF channels.

To achieve its purpose H.R. 9267 does several things.

(1) H.R. 9267 would give the FCC power to require that all television sets shipped in interstate commerce or imported into the United States must be capable of receiving all channels allocated for television, including present VHF channels 2 through 13. As I understand it, this is the same power which the FCC seeks in H.R. 8031, which Chairman Harris introduced at the FCC's request, although the language of H.R. 8031 does not expressly mention channels 2

through 13. By assuring production and distribution of all-channel sets, we will make it possible in due time for those who see a need for new stations to put UHF commercial and educational stations on the air with assurance that the people will be able to see and hear their programs if they are interested in doing so. Thus, the orderly development of television, on the 70 UHF channels would be made possible without in any way adversely affecting the existing VHF television system.

(2) H.R. 9267 would give the FCC the power to prescribe minimum performance capabilities for television receivers to the extent appropriate to assure that all sets are capable of receiving all television channels, including channels 2 through 13. In other words, H.R. 9267 would not give the FCC power to require, for example, that all sets be color sets, or have a certain size picture tube, or be made with a certain size speaker, or have a built-in antenna, or have remote control tuning, or have knobs on the side, and so forth. The FCC's power over sets would be limited to their ability to receive all channels. Thus, H.R. 9267 would involve the minimum Government intervention in set manufacturing necessary to achieve the very important public interest goal of all-channel receiver distribution. In its present form the Commission bill, H.R. 8031, does not narrowly limit the FCC's power over receivers. However, I understand that in the hearings before the Senate Subcommittee on Communications 2 weeks ago the FCC recognized that its power to prescribe minimum performance capabilities should be limited only to the all-channel capability aspect.

(3) H.R. 9267 would prohibit the FCC from shifting VHF television stations to UHF channels, either on a case-by-case basis or as part of an overall shift of all or a substantial part of all television to UHF. The Commission bill, H.R. 8031, is silent on this point. I have no doubt that all-channel set legislation should include this prohibition against shifts of VHF stations to UHF. It is axiomatic that television should not be taken away from people, and particularly people in rural, farm, outlying, and smalltown areas who have, if anything, a relatively greater dependence on television than people in big metropolitan centers. Yet this is exactly what shifting VHF stations to UHF would do. For example, if channel 12 were taken away from Montgomery in my State of Alabama, as the FCC has proposed, and if WSFA–TV were shifted to UHF, more than 50,000 people would be left without any grade B television signals and more than 140,000 other people would be cut back from 2 grade B signals to 1 grade B signal. We in the Congress must protect the people against these losses of television.

It may be contended that there is no relationship between all-channel receiver legislation and shifts of VHF stations to UHF. I cannot agree. The fact remains that the FCC has left no doubt that it regards an all-channel set law as a means of helping it to shift either some or all VHF stations to UHF. H.R. 9267 would assure that these shifts could not occur. Of course, if the Congress does not enact an all-channel set law, the FCC certainly should not seek to foster all-channel set distribution by shifting any or all VHF stations to UHF.

I recognize that H.R. 9267 would limit to some extent the power of the FCC to change television channel assignments. I intend this to be the case in connection with shifts of stations from VHF to UHF. However, H.R. 9267 would not stop the FCC from shifting a station from one VHF channel to another VHF channel as it did with a Rochester station last summer, for example. It would not stop the FCC from taking a VHF channel away from one licensee and giving it to another in the same community if such action otherwise would be in the public interest, as it did with a station in Miami last year, for example. It would not stop the FCC from moving a station from one community to another as it did when it added a station to Little Rock a few years ago, for example. And it would not stop the FCC from adding a new VHF channel to a community as it did in Syracuse, Rochester, and Grand Rapids last year, for example.

Because VHF television is so important to the people, and because of the harm the people would suffer from shifts of VHF stations to UHF, I have no doubt that the limitations on the FCC's power involved in H.R. 9267 are completely justified in the public interest and do not unnecessarily tie that FCC's hands in connection with making frequency assignments. Since the FCC is an arm of the Congress, in a matter as important as VHF television service to the public it is perfectly appropriate—indeed it is essential—for the Congress to withhold from the FCC power to shift VHF stations to UHF.

Thank you.

STATEMENT OF HON. JOHN E. MOSS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. Moss. Mr. Chairman, I have no formal statement. My remarks will be very brief.

As the committee knows, I introduced a bill similar to that of the gentleman from Alabama. I am not wedded to the precise language. But I would regard as a minimum requirement that in withdrawing any station from a community, that the Commission first find that it would not result in any diminishing of the service available to the viewers of that station, or in that community.

It seems highly inconsistent to me that after the Commission has allocated these channels, on a showing of need, and the ability to meet the need, and an operation has continued as it has in many instances for 10 or more years, that a community should be deprived of a service and given something less able to meet its needs.

Perhaps we should not say that a transfer could never be effected. But certainly there should be some policy guidance from the Congress to the Commission.

I think it quite possible that in the markup sessions of the committee that we will be able to agree upon language which does protect the people of the areas now threatened with a substantial decrease in service.

I think the proposal to require all-channel receivers has great merit. I think it should be limited, however, in scope so that the Commission is not able to impose arbitrary standards which are in no way pertinent to the scope of channels a set might receive.

I think had Congress or the Commission acted many years ago to require the manufacture of all-channel receivers, that the problem at the moment would be far less.

I was just noting the map of the Federal Communications Commission, prepared apparently in connection with their presentation. There are 103 UHF channels now being used, and 1,441 not used. Certainly it is far more of a gamble if a potential licensee has to look to bringing about conversion of sets in an area, or has to encourage the purchase of new sets—it seems to me that it would be far more economical at the time of manufacture to require that sets are constructed to receive all licensed channels. I think it would permit a more effective utilization of the spectrum and provide service to many areas of the Nation now inadequately served.

I do not think the bill will impose any great economic burden on any part of the country. It might lessen the pressure for transfer of some of the VHF channels which are now eyed so covetously by other communities than those presently operating them.

I do not think it is necessary to deal any more extensively with the legislation at this time. We will have the opportunity to do that in the markup session. But I regard this as most significant legislation.

The CHAIRMAN. Thank you, Mr. Moss.

Any questions of Mr. Moss?

Our next witness will be Mr. Hemphill.

STATEMENT OF HON. ROBERT W. HEMPHILL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF SOUTH CAROLINA

Mr. HEMPHILL. Thank you, Mr. Chairman.

I would like permission to file my formal statement rather than read it.

The CHAIRMAN. It may be filed in the record.

Mr. HEMPHILL. I would like to file also the original letter that I wrote to the Commission on August 18, 1961, with two resolutions.

(The letter and resolutions referred to follow:)

AUGUST 18, 1961.

In re VHF station, Columbia, S.C.

Hon. NEWTON N. MINOW,
Chairman, Federal Communications Commission,
New Post Office Building, Washington, D.C.

DEAR MR. MINOW: I am deeply concerned by the recent action of the Commission which is aimed at eliminating the present VHF wide-coverage TV station, WIS–TV, in Columbia, S.C.

This station has been in operation for many years and during this time has made an outstanding effort to constantly improve the quality of its programing and the level of community service which it provides.

Of particular importance to me and my constituents is the fact that WIS–TV is the primary station which is able to transmit to the major portion of the area which I represent the news of the governmental activities of the State. In the area of agricultural activities, general market information, weather data, and agricultural programs produced at Clemson College are now made available to my district by means of WIS–TV.

If WIS–TV were to convert to UHF transmission, I feel that my constituents would be more apt to turn to VHF channels in North Carolina which presently broadcast into our area as their source of television service. Under these circumstances, they would be deprived of their primary means of television communication with all the agencies of State government and political, agricultural, and economic activity.

This particular action is not compatible with your views aimed at improving the level of television service to the public. It has the effect of penalizing a station which is performing a fine public service and which has attracted many loyal viewers.

In the event this station is eliminated, I shall consider it a personal and official affront to the needs of my people. I am satisfied that it was never the purpose of the Federal Communications Act to deprive people of a source of communication which they need and on which they depend and to which they are accustomed.

I request of your office that some public hearing be held and that I have the opportunity of being heard.

Thanking you for your courtesy, I am,

Yours very truly,

ROBERT W. HEMPHILL.

RESOLUTION OF COUNTY OF DARLINGTON, STATE OF SOUTH CAROLINA

Whereas the county of Darlington, S.C., is situated within the reception range of WIS–TV and the citizens of the county derive much information and pleasure from this station; and

Whereas the Federal Communications Commission's proposal to change WIS–TV television channel to a UHF channel would seriously deprive the people of Darlington County from receiving a variety of programs and news and information on matters of community and statewide interest: Now, therefore, be it

Resolved, That the Darlington County legislative delegation urges that the Federal Communications Commission allow WIS–TV to remain a VHF television station so as not to impose undue hardship and expense upon the citizens of Darlington County, S.C.; and be it further

Resolved, That copies of this resolution be forwarded to the Federal Communications Commission and to both Members of the U.S. Senate from the State

of South Carolina, and all Members of Congress from the State of South Carolina, so that they will be fully acquainted with the position of the people of South Carolina when this matter is considered.

Witness our hands and seals this 25th day of October 1961.

Respectfully submitted.

JAMES P. MOZINGO III,
Senator,
JOHN P. GARDNER,
RICHARD L. BEASLEY,
SIDNEY S. TISON, Jr.,
Members of the House of Representatives,
Darlington County, S.C.

RESOLUTION OF COUNTY OF SUMTER, STATE OF SOUTH CAROLINA

Whereas the county of Sumter, S.C., is situated adjacent to Richland County, S.C., of which Columbia, S.C., is the county seat, and is within the trading area of Columbia, S.C., where television station WIS–TV is located; and

Whereas the merchants and businessmen of Sumter County, S.C., advertise through the facilities of WIS–TV; and

Whereas WIS–TV renders a great business service to Sumter County in reporting news, weather information, and matters of interest to the citizens of Sumter County, including information concerning matters of interest beneficial to the farm population of Sumter County; and

Whereas WIS–TV has always cooperated in disseminating information on community and charitable projects and has been unselfish in the same; and

Whereas the Federal Communications Commission's proposal to change WIS–TV television channel to a UHF channel would seriously deprive the people of Sumter County from receiving news, information on matters of community and statewide interest, would seriously interfere with the merchants and businessmen of this community properly advertising their products, and would also seriously interfere with the people of the Sumter community receiving information concerning the greater Columbia trading area of which this community is a part; and

Whereas the citizens of Sumter County, in order to receive UHF telecasts, would have to go to great expense to convert their sets and antennas and many owners of television sets in this community are not financially able to bear such expense: Now, therefore, be it

Resolved, That the Sumter County legislative delegation, representing and speaking for the citizens of Sumter County, which number 75,000 people, urges that the Federal Communications Commission allow WIS–TV to remain a VHF television station so as not to impose a hardship upon the citizens of Sumter County, S.C.; and be it further

Resolved, That copies of this resolution be forwarded to the Federal Communications Commission and to both Members of the U.S. Senate from the State of South Carolina, and all Members of Congress from the State of South Carolina, so that they will be fully acquainted with the position of the people of South Carolina when this matter is considered.

Witness our hands and seals this 28th day of August 1961.

Respectfully submitted.

HENRY B. RICHARDSON,
Senator,
R. J. AYCOCK, Sr.,
C. W. GOODMAN, Sr.,
JOHN D. LEE, Jr.,
Members of the House of Representatives,
Sumter County, S.C.

Mr. HEMPHILL. Now, Mr. Chairman, I have one or two observations. In the first place, H.R. 8431, which is the Chairman's bill to provide the receivers on all sets, which I assume will be marketed in the future, contemplates what we know as intermixture. That is an ability to receive both the VHF and the UHF signals.

Now, if the deintermixture proposals which are presently before us, and which incidentally have singled out those particular areas that

only have one VHF station, then there is no reason for these receivers in the future to have anything but UHF. And so it seems to me that if we are going to have 8031, that we should not have deintermixture, because deintermixture and the purposes of H.R. 8031 are exactly converse.

Now, the thing that has amazed me about the proposal of the Commission is the fact that this is absolutely an abrogation of the will of the people. As I understand it, there has been no expression here and no evidence that the people of this country and the people of the areas affected want this thing to happen. Therefore, in my mind, I am wondering whether or not this is just a case of administrative injustice or administrative irresponsibility, or what I might call power mania, because I can see no excuse for a procedure of this kind which will deprive the people of these affected areas of the service they are now getting and will not supplant it with any service.

For instance, I live in a small town which is 45 miles from one VHF station and about 50 miles from the other. I do not get any UHF signal. If you took VHF away from Columbia, S.C., which is the affected area, I would not have any television from our State capital.

Now, I do not know where these Commissioners got the idea. The vote was, I believe, 4 to 3, and the unusual thing about it, when you look at the notice that was put out, was that the three men who signed the minority report, or were against it, one of them was the oldest member of the Commission, and two others were the people with the greatest technical ability.

Now, I cannot reconcile that with the cry of the people as represented by the Congressmen here today.

As I understand our Government, Mr. Chairman, we here in the Congress represent the people and speak for them. How the Federal Communications Commission, which is a creature of the Congress, can ignore the expressions of the people, such as are gathered here today, and are spoken for, is beyond my comprehension in our system of government.

Just to give you an idea of how many people would be adversely affected in my own State of South Carolina if the VHF channel is taken away from the State capital, 943,512 people would lose this particular station. They would not be in the range of any UHF station at Columbia, S.C. That is almost a million people who have investments in sets which do not have UHF television reception, but have only VHF. Those people certainly have some status in our consideration.

In addition, another 292,309 people would be left with only one service. Therefore, they would have no choice of services. Perhaps the Commission feels that they should have no choice of service. But if that is true, H.R. 8031 is an unnecessary piece of legislation, and yet I subscribe to it on a national basis.

The next thing, over 300,000 people would be reduced from three services to two.

Now, the chairman asked a very important question of some of the witnesses as to whether or not the particulars of Mr. Roberts' bill and some of the rest of us who have introduced similar or identical legislation, should be attached to H.R. 8031. I think it is very important in our deliberation here that we determine what we are going to have.

Are we going to have intermixture, which is VHF and UHF together? If so, what are we going to do with these eight stations that they now seek to take away from the people? We ought to ask the Federal Communications Commission that.

The next thing is, are we going to have regional deintermixture? That is, is the Federal Communications Commission going to have the arbitrary power—and people can get awfully power drunk up here in Washington, I have found out—are they going to have the power to say certain regions of this country can only get VHF and other regions only UHF? Is that what the people of this country want? I have no idea that the people of this country want such a thing, and I see no evidence of it in the Federal Communications Commission as furnished to me, at least not to the public, no evidence that the people want that.

The next is the question that do we want all UHF? Now, the difficulty of UHF is that it has a limited capability. Not only is it limited by distance, and the strength of the signal, but it is limited by the topography and the geography, and also the flora and fauna of the particular area.

Therefore, we would necessarily have to find out whether or not the Commission would be able to adjust, I suppose you would say, in its wisdom, to each particular area. The thought occurs to me as to what would happen to people in an area such as I live in, where the advertising media is not of such prosperity as to afford a UHF station. What are we saying to the people of this country? It appears to me we are saying that the Federal Communications Commission is going to decide whether or not you shall have the programs or not, and whether or not you shall have educational or information or entertainment programs, whether you would have VHF or UHF.

Another thing occurs to me. It is singular to me that some State capitals are affected. The capital of the great States of Alabama, South Carolina, and I believe the capital of Wisconsin are affected. I think it is very important to the people of the State to have information from their State capital that they can get, almost to the ends of the State, if not completely. That is important. The news of the State legislature is important to them, the things of the Government, administrative orders of one kind or another, and certainly the programs of the State.

So I think we are dealing here with a very precious commodity, and that is the service that the people are getting out in the areas which do not receive UHF service.

I join the Governor of Wisconsin and my distinguished friend from Alabama and others in saying that something has got to be done about it.

The reason I am so glad to bring in H.R. 8031, Mr. Chairman—we have got to have some vehicle. Apparently the vehicle of justice and the vehicles of the pleas of the people have not been sufficient so far. So we must use the vehicle of legislation.

Therefore, I would subscribe to H.R. 8031 and make some provision thereon or thereby to take care of these grave problems.

I certainly thank you.

(The full statement of Mr. Hemphill follows:)

STATEMENT OF HON. ROBERT W. HEMPHILL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF SOUTH CAROLINA

Mr. Chairman and fellow members of the committee. My interest in these hearings and the subject of television allocations is indicated by my sponsorship of H.R. 9293, which is a companion bill to H.R. 9267 introduced by my esteemed colleague, Congressman Kenneth Roberts of Alabama.

At the outset, it is essential to determine what public policy and what television allocations policy the Congress is being asked to implement by the various legislative proposals to provide all-channel television receivers in interstate commerce. H.R. 8031, requested and supported by the Federal Communications Commission, would authorize that agency to require all-channel receivers to implement television policy objectives already proposed or planned in the future by the Commission.

And what are those policies or objectives? The Commission's notice in pending docket No. 14229, adopted by a 4-to-3 vote, indicated the following three long-range alternatives:

(1) Intermixture of VHF and UHF assignments;

(2) Regional deintermixture, meaning all UHF assignments in certain areas of the country and all VHF assignments in other areas; or

(3) A shift of all television to UHF.

In discussing the importance and relationship of all-channel receiver legislation to these policy alternatives, the Commission states in paragraph 10 of its notice:

"10. If Congress enacts the receiver legislation requested by the Commission as referred to above, the passage of time will bring an ever-increasing number of all-channel sets. If the achievement of set compatibility in itself is enough to provide incentive for the building of UHF stations and to permit their successful operation, then perhaps a safety system of intermixed assignments can be achieved. Additionally, *improvement which the legislation can bring about on the receiver incompatibility problem would, in time, make possible a more thoroughgoing reallocation of channel assignments looking toward providing substantially all-UHF assignments in certain areas of the country* where population is dense and communities capable of supporting television stations are located close together. This will permit the employment of the VHF channels for an expanded, multichannel, all-VHF service in other areas, particularly those where terrain or sparseness of population make VHF service more appropriate. *Unless it be found later that all television can be shifted to the UHF portion of the spectrum*, such a regionally deintermixed system may permit the most effective possible use of the 82 channels now allocated to television. *The impact of such widespread allocation changes will be mitigated not only by the wide dissemination of all-channel sets but also by a transition period in which existing VHF stations will be allowed to broadcast simultaneously on a UHF channel, as discussed below.* [Emphasis supplied.]

Although the Commission indicates that the intermixture of VHF and UHF assignments is one of its long-range policy alternatives, it has already instituted individual proceedings to convert eight markets to all-UHF, indicating that this may be the beginning of a continuing policy of selective deintermixture. On this point, paragraph 9 of the Commission's notice in docket No. 14229 states, as follows:

"* * * The Commission attaches importance to making a start now by initiating proceedings in the above-named markets. It is contemplated that, as indicated by further studies and developing circumstances, and in response to further proposals, *additional deintermixture proceedings will be initiated in further markets at a later time.*" [Emphasis supplied.]

Trade press reports[1] around the time the Commission instituted its pending proposals indicated that the Commission's staff had compiled data on a number of additional potential deintermixture markets. These included markets in Arkansas, Georgia, Louisiana, Michigan, Pennsylvania, and Tennessee. It is argued that the Congress should not attempt to decide allocations policy and that such matters should be left to the expertise or competence of the Commission. However true that may be as a general proposition, the Commission here has asked Congres for legislation to implement alternative policies,

[1] Television Digest, July 24, 1961.

two of which involve the deletion of proven VHF television service from all or substantial parts of the counrty. Today in 1962, it is the capital and largest city of my State that is involved in a prospective loss of its proven VHF television service. In 1963, it may be the largest city in your State or district that is similarly involved—in 1964 or 1965, it may be all of the cities in your State or my State, or in the entire country.

The Congress, under such circumstances, must participate in the policy decision. On the one hand, the Congress is requested by the Commission to provide enabling legislation to implement prospective policies of shifting all or substantial parts of the country to UHF only—on the other hand, the Congress can and should determine that the established and proven VHF television service is the cornerstone of any national allocations policy and that UHF should be developed to complement rather than replace television service as we know it today. This is a decision that affects every television home and every television station in the country. A move of all television service to UHF, in addition to the losses and disruption of service, would obsolete close to 50 million VHF-only receivers in the hands of the public representing an investment of over $10 billion. This is a question of such tremendous importance to all of the people that it should be decided by Congress as the elected representatives of the people.

We understand that a majority of the Commission is presently opposed to any general move to all UHF. However, based on the notice in docket No. 14229, a majority is in favor of a continuing program of UHF deintermixture and for keeping open a decision on the move of all or substanial parts of the country to UHF only. It is fair to conclude that the Commission's multipronged proposals announced in docket No. 14229 are more compatible with a multistage move of all television to UHF than with an orderly development of UHF to complement the existing service, which is predominantly VHF.

Commissioner Lee, who is presently an avowed advocate of moving all television to UHF, previously stated to the Senate Communications Subcommittee, in part, as follows:

"Mr. Chairman, from my standpoint, I am a strong free enterprise man. * * * I would do anything I could to help UHF on a technical basis, but as far as the allocations, I think the disruption would be awfully serious when you consider 30 million sets.

"I can imagine what would happen in Congress with the uproar from all those people who would have to make some adjustment of their aerial and some adjustment of their machines. * * *

"I have information that UHF will be all right in the long run. I would hesitate to go so far as to impose more governmental control in order to help a problem and thereby create more problems by the very means we use to solve them.

"I am in sympathy with removing of the excise tax and I would do things like that, but anything that would not be well within the free-enterprise system, I would oppose transferring to the UHF or putting all television in the UHF band."

That was in 1954. We certainly do not criticize Commissioner Lee for modifying his position in the intervening period, but, in my opinion, the arguments that he advanced then against a move to UHF are far more compelling today. It also illustrates my point that the pending question is not whether or not the Commission should have the freedom to decide eight individual cases—instead we are concerned with a prospective, and very possible, disposition on the part of the Commission to move all or a substantial part of television service to the UHF only—a decision which affects every Member of Congress, the entire television industry, every television station, and every television home.

We firmly believe that the retention of the existing, proven and established VHF television service is essential to our national television allocations policy. Our present television system, largely based on operating VHF assignments, provides substantially all of the areas and populations of this country with quality television service and with a choice of television services. These VHF channels are an important national resource, with substantial benefits in terms of our national economy, our national defense, and the general national welfare.

Like everything else, our present television system and television programing are not perfect—but the advancements and accomplishments to date, on balance, have been too notable and too important to risk in any basic reallocation and the substitution of inferior UHF for proven VHF service. What we now have is an excellent foundation to build on—not to tear up.

Considering the relative shortcoming of UHF in comparison with VHF, selective or regional deintermixture, or any shift to all UHF, is bound to leave many rural areas and small communities without adequate television service. Technical authorities apparently agree, and the Commission recognizes, that UHF is substantially inferior to VHF in coverage potential, that UHF is more adversely affected by terrain and heavy foliage and that UHF means less service at greater cost.

Government action to prohibit a proven superior product to force the public to accept an inferior one is, in my view, a most novel and drastic approach.

There is a need to promote the UHF allocation to television in order to provide for long-range growth and to meet some current shortages. UHF should, however, be developed to complement rather than to replace the existing VHF service. H.R. 8031, proposed by the Commission, is defective in that it does not express a proper public policy of retaining existing VHF service. H.R. 9267 and H.R. 9293, on the other hand, are designed to implement this twofold objective:

First, retain proven VHF service; and

Second, provide for all-channel sets to remove receiver incompatibility and promote the development of UHF to provide additional and complementary television service.

Finally, my State and the people of my congressional district are gravely concerned and immediately affected by the Commission's deintermixture proposals. Several hundred thousands of people in South Carolina stand to lose television service from their State capital. Almost 300,000 people, residing mostly in rural areas and in small communities, would be deprived of their second television service and would lose their only NBC program service. Our State capital, the functions of our State government and our statewide educational, business and civic interests would be substantially prejudiced by the loss of Columbia's superior VHF communications facility.

As a result of this grave concern, the State of South Carolina, the entire South Carolina congressional delegation, the Governor and all major State executive department heads, the General Assembly of South Carolina, all county legislative delegations, and nearly all of the incorporated cities in central South Carolina are on record against UHF deintermixture and are participating in the FCC proceedings. The same is true for the presidents and other spokesmen for the major universities in our State, the South Carolina Educational Television Commission, and other educational groups. Deintermixture is opposed by both political parties in South Carolina, by the South Carolina Farm Bureau Federation and other agricultural groups, by civil defense spokesmen, and by religious leaders in the State and area. Because of the harm to our State's business and industrial development, deintermixture is opposed by the South Carolina Development Board, the State chamber of commerce, and county chambers throughout South Carolina. These are only a part of the apparently universal opposition by South Carolina, its leaders, its organizations, and its citizenry.

Thus, in conclusion, we urge that this committee favorably report legislation including provisions similar to H.R. 9267 and H.R. 9293 designed to serve the twofold objectives of retaining existing proven VHF services and providing all-channel receivers to assist the long-range development of UHF to complement existing television service.

Mr. SPRINGER. Would the gentleman yield?

Mr. HEMPHILL. I would be glad to yield to my distinguished friend.

Mr. SPRINGER. I want to say that at the Senate hearing—I do not desire to inject here any hearing of the other body—but I will admit I did get a pretty clear picture over there from the examination by the junior Senator of South Carolina, that the chairman is aware of the situation as it does exist in South Carolina, and it is quite a desperate one. I felt our situation in central Illinois was bad. But I think out of all the eight, the worst of the eight is the one in Columbia, S.C.

As the junior Senator said, "Mr. Chairman, I just have one little old measly V—that is all I have have. I would sure like to hold onto that little one."

Here is a situation of a whole State with one V, and one that is really rendering the rural people of South Carolina a pretty good service.

Thank you, Mr. Chairman.

The CHAIRMAN. Any further questions?

Thank you very much, Mr. Hemphill.

Are there any other Members of Congress or any other member that desires to testify at this time?

At this time we are glad to welcome the Honorable William G. Clark, attorney general from the great State of Illinois.

I might say to our colleagues that today was set aside for the purpose of giving an opportunity for Members of Congress to testify. We have had a full day with our colleagues. I think we have made a very good record—one of the best I believe I have ever seen, in my experience, Members of Congress make on any subject.

However, the attorney general of Illinois advised us he could be here today, but he could not be here later on in the week. For that reason, we have agreed to hear him today ahead of the other witnesses that are to come.

We are glad to welcome you, Mr. Attorney General, and would be glad to have your statement.

Mr. MACK. Mr. Chairman, I would like to join in welcoming our No. 1 lawyer from Illinois to our committee. We are quite anxious to hear his testimony.

I talked with the Governor when I was in Illinois last weekend. He expressed a great interest in this subject—the fact that Illinois would be adversely affected. I think the fact that the attorney general of Illinois has come here today certainly expresses the interest that the administration in Illinois, as well as the people of Illinois, has in this subject.

I also might say that our distinguished State auditor is present, as well, although he is not going to testify. I would certainly be glad for him to be recognized, too.

Thank you, sir.

STATEMENT OF HON. WILLIAM G. CLARK, ATTORNEY GENERAL OF THE STATE OF ILLINOIS

Mr. CLARK. Thank you, Mr. Chairman and members of the committee. I do appreciate the courtesy that was extended to me.

The legal business of the State of Illinois would have made it impossible for me to testify any day this week excepting today. So I do appreciate the great courtesy that was extended. I am very grateful.

As the legal representative of the people of the State of Illinois, I have become interested in the deintermixture proceedings instituted by the Federal Communications Commission and have from time to time intervened in proceedings which were instituted for the purpose of removing certain VHF stations from the State of Illinois. There are presently three such proceedings pending and my office has intervened in each of them.

With leave of the committee, if it is not out of order, I would like to offer as an exhibit my comments representing Illinois in all three

proceedings. They are quite lengthy. I do not want to take the time of the committee by reading them. But I would like leave to just attach them as an exhibit, if I might.

The CHAIRMAN. Very well, we will be glad to receive them.

(The documents referred to follow:)

Before the Federal Communications Commission,

Docket No. 14240

IN THE MATTER OF DEINTERMIXTURE OF ROCKFORD, ILL.

COMMENT OF THE STATE OF ILLINOIS

Comes now William G. Clark, attorney general for the State of Illinois, on behalf of the State of Illinois and its citizens and submits comments in opposition to the above-captioned proposal of the Federal Communications Commission to delete VHF television channel 13 from Rockford, Ill., and to deprive the people of the State of Illinois of a valuable existing service and in support of the position of the State of Illinois states as follows:

1. That Rockford, Ill., with a population in its corporate limits of 126,706 persons (according to 1960 Federal census) is the center of a very important community in the northern part of the State of Illinois; that it is surrounded by a large and heavily populated suburban area and is located in close proximity to many small cities, villages, and towns; and that in the area around all of these cities, villages, towns, and communities there is located farmland and dwellings; and that all of the people living in this area are now served by and depend heavily upon channel 13 of Rockford for television service.

2. That the State of Illinois is vitally interested in and is vigorously opposed to the proposed deletion of channel 13 from Rockford (*a*) because of the serious and far-reaching injury such action would cause to hundreds of thousands of people in the northern Illinois area and (*b*) because in addition to being unfair and injurious to the people it would be contrary to the provisions of the Communications Act of 1934, the established television allocations policy of the Federal Communications Commission, and the decisions of the courts. For these reasons the State of Illinois submits that the proposal to delete channel 13 from Rockford must be denied and that channel 13 must be retained in Rockford to continue to serve the public interest throughout the northern Illinois area.

3. That in the proposal to deintermix Champaign, Ill. (docket No. 14244), and in the proposal to delete channel 2 from Springfield, Ill. (docket No. 14267), the State of Illinois points out to the Commission that the deletion of these channels would clearly violate section 307(b) of the Communications Act of 1934, as amended, which requires the Commission to "make such distribution of * * * frequencies * * * among the several States and communities as to provide a fair, efficient, and equitable distribution of radio service to each of the same." It is also pointed out that deletion of channel 13 from Rockford would violate section 1 of the Communications Act of 1934, as amended, which states that the purpose of the act is to be "to make available * * * to all the people of the United States * * * efficient * * * radio * * * service."

4. That the Commission has previously recognized that deintermixture is not only an unsound allocation policy, but is also inconsistent with the Communications Act because it "would involve large-scale disruption to the public and introduce inequities and inefficiency in the distribution of station facilities among the separate communities and States" (hearings, Senate Committee on Interstate and Foreign Commerce, "Television Inquiry," 86th Cong., 2d sess., pp. 4585–4586 (1960)).

5. That there is a further reason under section 307(b) of the Communications Act not to delete channel 13 from Rockford. Illinois now has assigned only 8 commercial VHF channels. Numerous other States which have smaller populations and/or areas than Illinois have more commercial VHF channels. For example, nearby Missouri has 17 commercial VHF channels but has less than half the population of Illinois, and Ohio, with one-quarter less area and a population smaller than Illinois, has 13 commercial VHF channels assigned and one more proposed (docket No. 14324). It is suggested that under section 307(b) of the Communications Act of 1934, as amended, the purpose of providing a "fair,

efficient, and equitable service" to each of the States by distributing the frequencies "among the several States" could be accomplished by the institution of proceedings looking toward the addition of VHF frequencies in Illinois. To reduce the number of commercial VHF channels in Illinois still further by eliminating channel 13 from Rockford would be to make worse the already unfair and inequitable distribution of commercial VHF channels to Illinois.

6. That the State of Illinois is anxious that its people have as much television service as possible. It is clear, however, that deleting channel 13 from Rockford would mean less service—not more service—both immediately and for the foreseeable future. If channel 13 is deleted from Rockford the service it now provides could not be replaced unless a large number of new stations were to go into operation. But the nature of this area is such, and the evident economics of television broadcasting are such, that it would be wholly unreasonable to expect that these new stations would come into being in this area. Under these circumstances it is apparent that deletion of channel 13 would mean serious loss of service for the indefinite future, if not permanently.

7. That, as is well known by all members of this Commission, Congress has from time to time made an effort to insure equitable distribution of broadcast service by enactment of various statutes. That has been done in an attempt to prevent a concentration of superior facilities in certain areas at the expense of other areas.

8. That, as is well known by all members of this Commission, VHF service is superior to UHF service and any position taken by this Commission which overlooks this fact and which in effect looks at VHF service and UHF service as though they were alike, in effect ignores the basic difference between the two services.

9. That, as this Commission is aware, the Commission has from time to time taken different and divergent views respecting the question of deintermixture in specific areas and generally and at present the overall question is unsettled and is being widely discussed in the industry and in the Congress of the United States.

10. That it would be more logical and more likely to advance the public interest should the Commission attempt to secure statutory requirement assuring the production of all-channel television receivers rather than to give further consideration to the concept referred to as "deintermixture."

11. That question of competitive conditions in the television broadcasting industry or the question as to whether one community and State should be given service of one kind while another community or State be given service of an inferior grade, is not left to the Federal Communication Commission since this matter has already been determined by the Congress of the United States. In this connection the law has established no criteria as to competitive conditions in the industry and the statute has specifically prohibited discrimination between the various communities and States of the United States. In strong words to the contrary, Congress has indicated that the public interest is of paramount consideration.

12. That it is the position of the State of Illinois that if more television service is to be provided in the public interest it must be under a system that utilizes both VHF channels and UHF channels in an effective system of intermixture and that to this end the public interest would be better served by enactment of a statutory requirement assuring production of all-channel television receivers (such as pending H.R. 9267—the Roberts bill) than by the previously rejected concept of deintermixture. Consistent with this the 1st special session of the 72d General Assembly of the State of Illinois adopted Senate Joint Resolution No. 4 on October 17, 1961, under which it was—

"Resolved by the Senate of the Seventy-second General Assembly of the State of Illinois at the first extraordinary session thereof (the House concurring therein, That we are opposed to Federal Communications Commission deintermixture proposals so far as they affect Illinois, and that we respectfully request and recommend that the Senate and the House of Representatives of the United States give favorable consideration to the passage of bills prohibiting the deletion of VHF television channels from Illinois as proposed by the Federal Communications Commission."

Because of all the circumstances related herein it is urged that there is no legal basis for deleting channel 13 from Rockford, Ill. Accordingly, the Commission is urged to hold that channel 13 should be retained at Rockford in order

that it may continue to provide service in the public interest to the people throughout the northern Illinois area.

Respectfully submitted.

STATE OF ILLINOIS,
WILLIAM G. CLARK,
Attorney General.
By M. BROOKS BYUS,
Assistant Attorney General.

SPRINGFIELD, ILL., *February 15, 1962.*

Before the Federal Communication Commission, Washington D.C.

Docket No. 14267

IN THE MATTER OF DEINTERMIXTURE OF SPRINGFIELD, ILL.

COMMENT OF THE STATE OF ILLINOIS

Comes now William G. Clark, attorney general of the Sate of Illinois, representing the State of Illinois, and submits his comments in opposition to the above-captioned proposed rulmaking and says:

1. That Springfield, Ill., with a population of over 100,000 is the capital city of the State of Illinois, and is the seat of government of said State; that located in Springfield are the capital buildings, executive offices, legislative offices and chambers, armory, and facilities of the many departments, boards, and commissions, all of which are part of the State government, the operations and functions of which are of general and vital interest to the people of the State.

2. That the Supreme Court of Illinois convenes in Springfield, as does the Third District Appellate Court and the U.S. District Court for the Southern District of Illinois; and that the proceedings in these courts are of widespread interest to the people of the State.

3. That at the north edge of said city of Springfield is located the Illinois State fairgrounds where there is held annually the Illinois State Fair, generally regarded as being one of the largest and finest of all State fairs and agricultural expositions.

4. That as the seat of government of the State of Illinois, and as situs of the Illinois State Fair and various high courts, the city of Springfield is the location and scene of many activities, proceedings, conventions, celebrations, ceremonies, and events, incidental to the Government and judicial operations, all of which are of great interest and of educational, civic, political, and historical significance to the people of the State of Illinois.

5. That the allocation of television channel 2 to St. Louis, Mo., and the authorization of Signal Hill Telecasting Corp. to operate the same has now been vacated by decision of the court of appeals. That channel 2 is now assigned to Springfield, Ill., and the State of Illinois is vitally interested in the retention of said channel in Springfield, Ill.

6. That he is further informed and believes that there is now allocated for commercial VHF frequency, 16 channels to the State of Missouri and only 9 to the State of Illinois, notwithstanding that populationwise Illinois is more than twice the size of Missouri; and that to allocate said channel 2 to the city of St. Louis, Mo., would further disproportion the existing facilities to the great detriment of the State of Illinois and incontrovertion of section 307(b) of the Communications Act which requires allocation among the several States and communities in a fair, efficient, and equitable distribution of facilities.

7. That present UHF frequencies are entirely inadequate to telecast news, events, programs, interviews, and other activities emanating from the city of Springfield, due to the location there of the State government, the courts and the Illinois State Fair, to the number of Illinois residents that channel 2, with its VHF range, could reach; nor will the allocation of additional UHF facilities to Springfield remedy the situation.

8. That, as is well known by all members of this Commission, Congress has from time to time made an effort to insure equitable distribution of broadcast service by enactment of various statutes. That has been done in an attempt

to prevent a concentration of superior facilities in certain areas at the expense of other areas.

9. That, as is well known by all members of this Commission, VHF service is superior to UHF service and any position taken by this Commission which overlooks this fact and which in effect looks at VHF service and UHF service as though they were alike, in effect ignores the basic difference between the two services.

10. That, as this Commission is aware, the Commission has from time to time taken different and divergent views respecting the question of deintermixture in specific areas and generally and at present the overall question is unsettled and is being widely discussed in the industry and in the Congress of the United States.

11. That it would be more logical and more likely to advance the public interest should the Commission attempt to secure statutory requirement assuring the production of all-channel television receivers rather than to give further consideration to the concept referred to as "deintermixture."

12. That another important point involved in this proceeding is whether the removal of VHF channel 2 from Springfield, Ill., would violate section 307(b) of the Communications Act of 1934. In this connection it is the position of the State of Illinois that by the enactemnt of this section the Congress of the United States has by law set the policy which is controlling in this proceeding. Section 307(b) must be considered in order to make a valid determination as to whether channel 2 should be removed from Springfield, Ill. in this particular instance. The question is not one of how the Commission should construe this section and it is not one as to whether this section can be ignored. Congress, it appears, has spoken in words that are clear. A fair and equitable distribution of comparable television service must be given to all of the communities and States of the United States whenever application for such service is made.

13. That question of competitive conditions in the television broadcasting industry or the question as to whether one community and State should be given service of one kind while another community or State be given service of an inferior grade, is not left to the Federal Communication Commission since this matter has already been determined by the Congress of the United States. In this connection the law has established no criteria as to competitive conditions in the industry and the statute has specifically prohibited discrimination between the various communities and States of the United States. In strong words to the contrary. Congress has indicated that the public interest is of paramount consideration.

14. That any action by this Commission which has the effect of deleting the one VHF channel now assigned to Springfield, Ill., and adding such channel to St. Louis, Mo., which already has four VHF channels, one of which is reserved for educational use, obviously would to anyone in the television industry appear to be discriminatory. It is difficult to appreciate the logic of anyone holding to the contrary. This position should not be expected from any source except certain adverse interests who are striving to obtain the channel for their own use.

Wherefore the State of Illinois submits that the allocation of VHF channel 2 to Springfield, Ill., is a fair, equitable, and necessary assignment of that channel and it would be against the public interest to remove said channel from Springfield, Ill.; and that it would be contrary to section 307(b) of the Communications Act of 1934 to transfer channel 2 from Springfield, Ill., to St. Louis, Mo.; and that such transfer would result in the deprivation of the population of the State of Illinois in many areas thereof of VHF television facilities and coverage and that by the imposition of the so-called deintermixture in the Springfield area as proposed by the Commission, the Commission would fail to allow the utilization to the fullest extent of VHF service while at the same time assuring the viewers of the Nation the benefits of development and improvement of UHF service.

For these reasons it is urged that the Commission give no consideration to the deintermixture of Springfield, Ill.

Respectfully submitted.

STATE OF ILLINOIS,
WILLIAM G. CLARK,
Attorney General.
By M. BROOKS BYRUS,
Assistant Attorney General.

SPRINGFIELD, ILL.

BEFORE THE FEDERAL COMMUNICATIONS COMMISSION, WASHINGTON, D.C.

Docket No. 14244

IN THE MATTER OF DEINTERMIXTURE OF CHAMPAIGN, ILL.

COMMENT OF THE STATE OF ILLINOIS

Comes now William G. Clark, attorney general of the State of Illinois on behalf of the State of Illinois and its citizens and submits comments in vigorous opposition to the above-captioned proposal of the Federal Communications Commission to delete VHF television channel 3 from Champaign, Ill., and to deprive the people of the State of Illinois of an existing service which has been so much in the public interest.

The State of Illinois is vitally interested in and is vigorously opposed to the proposed deletion of channel 3 from Champaign (*a*) because of the serious and far-reaching injury such action would cause to hundreds of thousands of people in the central Illinois area, and (*b*) because in addition to being unfair and injurious to the people it would be contrary to the provisions of the Communications Act of 1934, the established television allocations policy of the Federal Communications Commission, and the decisions of the courts. For these reasons the State of Illinois submits that the proposal to delete channel 3 from Champaign must be denied and that channel 3 must be retained in Champaign to continue to serve the public interest throughout the central Illinois area.

The parts of Illinois which now depend heavily upon channel 3 of Champaign for television service are large and mostly of farm and rural nature and are made up of many small and medium sized communities. The people of this State who live in this area today depend partly on UHF service transmitted from their own immediate community or their choice of WCIA channel 3 at Champaign because VHF service from Champaign is able to reach these people although many of them live a considerable distance from Champaign. This, of course, is because of the fact that VHF television channels are able to serve a much larger area than UHF television channels and because channel 3 is the only VHF channel available to provide service in the area. If channel 3 were deleted from Champaign and even if WCIA were to shift its operations from channel 3 to a UHF channel, great numbers of Illinois residents would lose television service and an even larger number would be subjected to deteriorated service.

The State of Illinois is informed that WCIA will, in its comments in this proceeding, demonstrate to the Commission, among other things, that shifting WCIA from channel 3 UHF—

(*a*) Would take grade B or better television service away from 596,000 people most of whom reside in Illinois;

(*b*) Would leave 140,215 people, most of whom reside in Illinois, without any grade B or better television service at all;

(*c*) Would reduce 237,050 people, most of whom reside in Illinois, from their present choice of two grade B or better television services to one television service;

(*d*) Would deprive at least 211,385 residents of Illinois of any grade B or better television service from an Illinois television station; and

(*e*) Would force thousands of citizens of Illinois to spend large sums of money totaling several million dollars to convert receiving apparatus from VHF to UHF in order to continue to receive television service (although conversion would not be an available alternative for those other thousands of people who are now within range of channel 3 but would not be within range of a UHF station if such station were substituted for present channel 3.

As in other proposals now pending before the Commission to wit: Proposal to deintermix Rockford, Ill., docket No. 14240, and proposal to delete channel 2 from Springfield, Ill., docket No. 14267, the State of Illinois points out to the Commission that the deletion of channel 3 from Champaign would clearly violate section 307(b) of the Communications Act of 1934, as amended, which requires the Commission to "make such distribution of * * * frequencies * * * among the several States and communities as to provide a fair, efficient, and equitable distribution of radio service to each of the same." It is also pointed out that deletion of channel 3 from Champaign would violate section 1 of the Communications Act of 1934, as amended, which states that the purpose of the act is to

be "to make available * * * to all the people of the United States * * * efficient * * * radio * * * service."

On the face of it, taking an existing television service away from 596,000 people leaving 140,215 people without any grade B or better television service and reducing 237,050 people from 2 to 1 grade B or better service is wholly inconsistent with sections 1 and 307(b). The inconsistency with section 307(b) is all the more grave in view of the fact that a very large population in Illinois would be deprived of the only television service they have from an Illinois station if channel 3 were deleted from Champaign and if they retain access to any television stations these would be out-of-State stations which would not have the same interest in and would not devote the same attention to Illinois matters as is now the case of channel 3.

That the proposal to delete channel 3 from Champaign is inconsistent with section 1 and 307(b) of the act is further evident from the priorities established by the Federal Communications Commission in the sixth report in the order of 1952 inasmuch as such order specifically dealt with these provisions of the act. The first priority is to provide at least 1 service to all parts of the United States to create a "white area" of 140,215 persons (such as would result from the deletion of channel 3) would clearly violate the first priority. The third priority is to provide a choice of at least two television services to all parts of the United States to create a "gray area" in which 237,050 persons would be reduced from 2 services to 1 service (such as would result from the deletion of channel 3) would clearly violate the third priority.

The courts have made clear that losses of service to the public such as those proposed by the Commission herein are not compatible with sections 1 and 307(b) of the Communications Act. Thus, in the recent case of *Television Corporation of Michigan* v. *F.C.C.* (249 F. 2d 730 (D.C. Cir. 1961)) the U.S. Court of Appeals for the District of Columbia Circuit pointed out that a proposal which would leave 900 persons without any grade B or better service (compared with 140,215 here) would reduce the choice of grade B or better service from 2 to 1 for 42,000 other people (compared with 237,050 here) and would take a television service away from 97,000 people (compared with 596,000 here) was not consistent with these sections of the act unless it could be shown that there were clearly offsetting factors justifying the losses. No such offsetting factors exist with respect to the proposal to delete channel 3 from Champaign. As a matter of fact the Commission had not proposed to use channel 3 elsewhere if it is deleted from Champaign and there appears to be no such available alternate television uses; thus there could not even be the showing here (that was made in the Michigan case but rejected by the court) of an additional service being provided to another population group. The Commission's proposal comes down to nothing more than a plan to take television service away from the people of Illinois without providing any new service either to these people or to other people.

The Commission has previously recognized that deintermixture is not only an unsound allocations policy, but is also inconsistent with the Communications Act because it "would involve large-scale disruption to the public and introduce inequities and inefficiency in the distribution of station facilities among the separate communities and States." (Hearings, Senate Committee on Interstate and Foreign Commerce, television inquiry, 88th Cong., 2d sess., 4585–86 (1960).)

Moreover, with specific reference to Champaign and channel 3, in two unanimous 1958 decisions the Commission held that there was so little merit to proposals to delete channel 3 from Champaign that formal rulemaking proceedings were not even warranted to look further into the matter (*Channel Assignments in Champaign-Urbana*, 16 R.R. 1630 (March 1958), affirmed, *Channel Assignments in Champaign-Urbana*, 16 R.R. 1634b (December 1958)). Since there has been no change in the facts or in Commission policy to warrant a different result at the present time, any decision to delete channel 3 from Champaign would be arbitrary and capricious.

There is a further reason under section 307(b) of the Communications Act not to delete channel 3 from Champaign. Illinois now has assigned only 8 commercial VHF channels. Numerous other States which have smaller populations and/or areas than Illinois have more commercial VHF channels. For example, nearby Missouri has 17 commercial VHF channels but has less than half the population of Illinois, and Ohio, with one-quarter less area and a population smaller than Illinois, has 13 commercial VHF channels assigned and one more proposed (docket No. 14234). It is suggested that under section 307(b) of the Communications Act of 1934, as amended, the purpose of providing a "fair, efficient, and

equitable service" to each of the States by distributing the frequencies "among the several States" could be accomplished by the institution of proceedings looking toward the addition of VHF frequencies in Illinois. To reduce the number of commercial VHF channels in Illinois still further by eliminating channel 3 from Champaign would be to make worse the already unfair and inequitable distribution of commercial VHF channels to Illinois.

Without in any way detracting from the value of existing UHF television service in the State of Illinois, the fact remains that the few VHF channels in Illinois, such as channel 3 at Champaign, are able to perform and do perform a very vital and unique service for the people of Illinois. That is, with their special ability to provide coverage over broad areas, VHF channels, such as channel 3 at Champaign, provide the smaller communities and rural and outlying areas of our State with television service they would otherwise be without. Moreover, this service is not just entertainment—although the importance of the existing entertainment service to these areas is not to be minimized. This service includes very important news, religious, educational, discussion, and other public service programing. WCIA, which operates on channel 3 at Champaign, has very effectively used this wide coverage capacity to well serve the public interest. The people within its area have benefited greatly from its farm and educational programing, for example. In addition, the wide coverage of channel 3 at Champaign has effectively helped various of the State offices and departments with their work and projects, especially in the areas of education and agriculture. And in its handling of general matters of local and State interest channel 3 at Champaign has well served the people of central Illinois.

The State of Illinois is anxious that its people have as much television service as possible. It is clear, however, that deleting channel 3 from Champaign would mean less service—not more service—both immediately and for the foreseeable future. If channel 3 is deleted from Champaign the service it now provides could not be replaced unless a large number of new stations were to go into operation. But the nature of the area is such, and the evident economics of television broadcasting are such, that it would be wholly unreasonable to expect that these new stations would come into being in this area. Under these circumstances it is apparent that deletion of channel 3 would mean serious loss of service for the indefinite future, if not permanently.

It must be emphasized, on the other hand, that keeping channel 3 in Champaign poses no threat at all to continuation of existing service—including UHF service—in the area. Four UHF stations operate in the area served by channel 3. These are WICS, Springfield; WTVP, Decatur; WICD, Danville; and WCHU, Champaign. The owners of these stations have gone on record with the Federal Communications Commission in the past 10 weeks to the effect that there is "reasonably effective competition" between these UHF stations and the channel 3 station at Champaign, that these UHF stations "are operating successfully," and that the presence of channel 3 at Champaign has not prevented them from being able to "continue to operate and to expand their service to the public" (comments of Plains Television Corp. and WHVP-Metropolitan Broadcasting Corp., docket No. 14267, p. 15 (Dec. 4, 1961); reply comments of the same parties, pp. 2, 6 (Jan. 8, 1962)).

It is the position of the State of Illinois that if more television service is to be provided in the public interest it must be under a system that utilizes both VHF channels and UHF channels in an effective system of intermixture and that to this end the public interest would be better served by enactment of a statutory requirement assuring production of all-channel television receivers (such as pending H.R. 9267—the Roberts bill) than by the previously rejected concept of "deintermixture." Consistent with this the 1st special session of the 72d General Assembly of the State of Illinois adopted Senate Joint Resolution No. 4 on October 17, 1961, under which it was—

"*Resolved by the Senate of the Seventy-second General Assembly of the State of Illinois at the first extraordinary session thereof* (the House concurring therein), That we are opposed to Federal Communications Commission deintermixture proposals so far as they affect Illinois, and that we respectfully request and recommend that the Senate and the House of Representatives of the United States give favorable consideration to the passage of bills prohibiting the deletion of VHF television channels from Illinois as proposed by the Federal Communications Commission."

Under all of the circumstances there is neither factual nor legal basis upon which the Commission could delete channel 3 from Champaign. Accordingly,

the Commission should retain channel 3 at Champaign so that it may continue to provide service in the public interest to the people throughout the central Illinois area.

Respectfully submitted.

STATE OF ILLINOIS,
WILLIAM G. CLARK,
Attorney General.
By M. BROOKS BYUS,
Assistant Attorney General.

SPRINGFIELD, ILL., *February 15, 1962.*

Mr. CLARK. I have intervened in these matters because it is my belief that to do so is in the best interest of the people of the State of Illinois, and further, because I believe that section 307(b) of the Communications Act can only be interpreted in such a manner as to require (insofar as there is a demand for the same) distribution of VHF licenses and frequencies for operation in the State of Illinois.

This same logic would demand the retention of existing VHF facilities in the State. In comments filed with the Commission, I have pointed out that Illinois is the Nation's fourth most populous State and is assigned only eight commercial VHF channels. Numerous other States which have smaller population and fewer square miles of territory than Illinois have many more commercial VHF channels.

I have suggested that under section 307(b) of the Communications Act of 1934, as amended, the purpose of providing a "fair, efficient, and equitable service" to each of the States by distributing the frequencies "among the various States" would more likely be accomplished by the institution of proceedings looking toward the addition of VHF frequencies in Illinois. To reduce the number of commercial VHF channels, as now proposed by the Commission, would be to make worse the already unfair and inequitable distribution of commercial VHF channels in Illinois.

I am not interested in any way in detracting from the value of existing UHF television service in the State of Illinois and have made in comments to the Commission certain recommendations as to methods to be followed which may lead to a greater utilization of the VHF and UHF channels.

The fact remains, however, that the few VHF channels in Illinois, such as channel 3 at Champaign and channel 13 at Rockford, are able to perform and do perform a very vital service for the people of Illinois. Channel 2, which is assigned to Springfield, could, if in operation, perform a similar service for the central part of the State. The Springfield frequency has never been used because of long and drawn-out proceedings in the Commission and in the courts.

As attorney general of the State of Illinois I have been most interested in what appears to my offce to be the clear intent of section 307(b) and for that matter have no special or technical knowledge with respect to the engineering features involved. For this reason I have relied on information on file with the various comments and briefs filed by many Illinois licensees who were threatened with deprivation of their license and by prospective licensees in Illinois who, because of the Commission's position with relation to deintermixture, were unable to obtain a license for a VHF station.

A review of all the information available in connection with this matter, it may be stated simply that VHF permits a better coverage of a much larger area for less money than does UHF. In addition, all

the sets sold in the United States are equipped to receive VHF signals whereas only those sets specially altered or converted are able to receive the UHF channel.

The cost of transmission is greater for UHF and the cost of reception is more difficult and more expensive to the viewer who happens to be residing in an area where he must depend upon the UHF service. I would not attempt to go into this matter further inasmuch as any one of you have the same access to these engineering studies as do I.

It is interesting to note that officials who deal with this problem have in the past arrived at some conclusions which are consistent with my own. For instance, in 1956 the gentleman then serving as Chairman of the Communications Commission stated:

> A VHF service presents is superior to a UHF. In comparison with UHF a VHF signal has a wider coverage and less shadow area. Both in operation and reception, VHF is less costly. To ignore these differences in the present stage of the development of broadcasting is to disregard the specialized knowledge of this Commission and the experience of the industry and the public.

Attention is also called to the case of *Easton Publishing Company* v. *FCC* (85 U.S. App. D.C. 33; 175 F. 2d 344) wherein the court held that in the consideration of the distribution of AM and FM radio stations "the Commission is not required to ignore the basic difference between the two services." Later, considering the same question as applied to television the U.S. court of appeals stated:

> The audiences, networks, and advertisers prefer the superior VHF outlets. (See *Wirl Television Co.* v. *United States* (102 U.S. App. D.C. 341; 253 F. 2d 863).)

I am not contending that this act is easy to administer and I realize the difficulty the Commission has in attempting to administer the act in such a manner as to provide an equal distribution of the license and frequencies among the communities and States. I do believe, however, that section 307(b) is a mandate which requires that the State of Illinois, so far as the distribution of licenses and frequencies is concerned, must be considered on the same basis as any other State. As suggested, this appears to be called for under the present act and any other interpretation would appear to be not only a discrimination against the television viewers of the State, which I represent, but also clearly contrary to section 207(b) of the Federal Communications Act.

Another matter which, I believe, should be given consideration is the matter of "priorities" established by the Federal Communications Commission in the sixth report in 1952. Consideration should be given to the question as to whether these "priorities" should be a matter of administrative determination or whether they should be spelled out in the statute in clear language.

It is difficult to see how one can argue against the proposition that the first priority should provide at least one service to all parts of the United States and that each subsequent priority should be defined with the same theory in mind, at least up to the point where any area becomes saturated. Any changes in the present law, in this regard, should be designed so as to secure an equal opportunity so far as is possible to all of the viewers of the Nation.

There has been a tendency to give great weight to the competitive factor as it is applied to the industry. In this connection it is sug-

gested that neither the law, nor the administration of the law, should be used for the purpose of punishing broadcasters or putting them out of the business.

It is submitted, however, that the first purpose of the Communications Act is to protect the public and so far as possible to provide service to the viewers of this Nation. This was well stated in *FCC* v. *Sanders Brothers Radio Station* (309 U.S. 470), when the Court said:

> Plainly it is not the purpose of the act to protect a licensee against competition, but to protect the public. Congress intended to leave competition in the business of broadcasting where it found it, to permit a licensee who was not interfering electrically with other broadcasters to survive or succumb according to his ability to make his programs attractive to the public.

In this case it would appear that the Court has expressly negated any theory of "competitive equality." Obviously, Congress had the viewing public in mind when it required that service be distributed fairly, efficiently, and equitably among the several States and communities. Consistent with this is the case of *Federal Radio Commission* v. *Nelson Brothers Bond and Mortgage Company* (289 U.S. 266). In that case I believe the Court summed up the theory which must prevail when it said:

> The concern of the Congress was with the interests of the people—that they might have a reasonable equality of opportunity in radio transmission and reception, and this involved an equitable distribution not only as between zones but as between States as well.

In conclusion I would like to restate the points which must be considered in connection with the administration of the Federal Communications Act or in any legislative changes. They are as follows:

1. VHF provides a better coverage of a larger area at a lower cost than UHF. If this were not true we would not be here today and you would not be faced with the proposition of people clamoring for VHF licenses.

2. UHF reception requires more in the way of alterations on receivers and construction of towers and is therefore more costly to the viewer.

3. The public interest and the viewing public are the primary consideration and the advantages and disadvantages of competition in this field should not be allowed to obscure this concept.

4. The matter of priorities should be settled and should be administered in such a manner as to work to the advantage of the entire viewing public of the Nation.

As the attorney for the people of the State of Illinois I have become peculiarly aware of the problems concerned with herein since because of the fact that Illinois occupies a position at the center of the Nation's population, the Federal Communications Commission has seemed to give our State an unusual amount of attention and has persisted in making proposals to delete stations already in existence, to deny licenses applied for, and to delay authority to construct where licenses have been assigned. The work of the Commission could, no doubt, be made easier if there were a large UHF island in the central part of the country since then the Commission could make assignments on each side of the island with less probability of conflict. It is our position that the law pertaining to these matters must consider the population of the communities and the States affected.

It must consider the number of channels already available to the viewing public in all areas and it certainly must be written and administered in such a way that it will not discriminate against or penalize any area of our country.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much, Mr. Clark, for your statement.

Mr. SPRINGER. Mr. Chairman, may I say to the attorney general I congratulate him on the excellence of his statement, as well as the quality of his statement.

Mr. MACK. Mr. Chairman—Mr. Attorney General, I, too would like to commend you on a very fine statement. I wanted to ask about the Springfield station, channel 2. Channel 2 in Springfield is not one of the eight included in the rulemaking procedure at the present time. But it is in exactly the same position as the eight VHF stations, as a result of the direction of the court of appeals, which required the Federal Communications Commission to take a fresh start in the now famous *Sangamon Valley* case.

I make that statement at this time because I feel that it might be confusing to some of the people here if it was not explained.

Now, am I substantially correct?

Mr. CLARK. Yes. Congressman.

Mr. MACK. Thank you.

The CHAIRMAN. Thank you.

Mr. CLARK. Thank you, Mr. Chairman.

The CHAIRMAN. Any further questions by members of the committee?

Thank you very much, Mr. Attorney General.

I would like to join the members of the committee in complimenting you on a very splendid statement you have presented to us today. We are very glad to have you with us.

I also want to extend to your treasurer a cordial welcome to the committee, and want him to know we are glad to have him with us today.

May I further say this. The attorney general has been extremely active in trying to get a V in Springfield and prevent the two V's from being taken out of Illinois. He has cooperated with the committee which has been formed on a bipartisan basis in the State of Illinois. The cochairman of that particular committee is my colleague, who happens to be the treasurer of the State of Illinois, and is a Democrat. The other cochairman of that committee is Charles Carpentier, a Republican, who is the secretary of state. This commitee has been extremely active in trying to see that we do retain these two V's which threaten to be taken away, and also that the V which is presently under consideration is kept at Springfield, Ill.

So this thing has received a lot of consideration. I know the Governor has been very, very interested in it.

The three agricultural associations—that is the Grange, the National Farmers' Union, and the Illinois Agricultural Association, which is the largest farming farm union in the country, have all been on record in favor of the position which the attorney general has stated. I think that when he comes here in this capacity as attorney general representing the State of Illinois, he has the full backing of the great majority of the people in Illinois in his position.

Mr. CLARK. Thank you, Congressman.

The CHAIRMAN. At this time, I have several statements that will be included in the record at this point. First, the statement of Hon. Earl Wilson, of Indiana. He was given permission to file that statement this morning. That will be included in the record.

I also have statements from our colleagues, Mr. Frank Kowalski, of Connecticut; Mr. Emilio Q. Daddario, of Connecticut; Mr. Samuel S. Stratton, of New York; Mr. Emanuel Celler, of New York; Mr. Henry S. Reuss, of Wisconsin; Mr. Noah M. Mason, of Illinois; Senator Homer E. Capehart, of Indiana; Mr. James H. Morrison, of Louisiana; Mr. Gorden M. Scherer, of Ohio; Mr. John M. Slack, Jr., of West Virginia; Mr. Otto E. Passman, of Louisiana; Mrs. Leonor K. Sullivan, of Missouri; Mr. Bob Wilson, of California; and Mr. Robert N. Giaimo, of Connecticut.

(The statements referred to by the chairman follow:)

STATEMENT OF HON. EARL WILSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF INDIANA

Mr. Chairman and members of the committee, my appearance here today is motivated by a deep desire to guarantee to each and every resident of my district and to the constituents of every other Member of this body the God-given rights of free speech as embodied in our Constitution.

There is afoot in our Nation today a scheme by which complete control of mass communication media may be realized. This bill you are now studying, H.R. 8031, for all its brevity and innocuousness, is an integral part of this scheme.

I think no statement would convey my feelings to you as concretely as my newsletter of this week, which deals with the ultimate purpose of this legislation and which also deals with encroachment on our freedom of speech and our freedom to know.

I should like to have my thoughts on this subject made a part of your record.

INSIDE WASHINGTON—FOR THE WEEK OF MARCH 5, 1962

(By Congressman Earl Wilson)

Are you prepared to give up television? If so, you may not care to read the remainder of this report. If you are enjoying your television entertainment, and if you wish to continue to do so, analyze the remainder of my newsletter carefully. It is later than you think.

A plan is already in operation which will parallel existing VHF television channels with UHF channels. The step that follows this, however, is the one that will concern you most. This step is to eliminate VHF channels altogether, supplying TV service through use of many new additional UHF frequencies. These new UHF channels will be given to friends of the administration who will do all in their power to further the purposes of the powers that be. This is the real reason behind proposed abolition of the VHF channels you now enjoy.

Once these present channels are eliminated, a great segment of the people of the United States will be without television reception. Many thousands of these are in my own congressional district, Lawrence, Orange, Washington, Brown, Jackson, Scott, Jennings, Jefferson, and Bartholomew Counties will be either completely or partially blacked out. Cities such as Mitchell, Bedford, West Baden, French Lick, Paoli, Brownstown, Bedford, Crothersville, Seymour, Austin, Hanover, and Madison will be completely outside the fringe area—they will receive no television coverage whatsoever.

The Federal Communications Commission has a plan to locate additional UHF channels to cover these areas. Where, may I ask, is there a community in my district financially able to support any kind of a TV station to cover these blacked-out areas?

This is an extremely serious matter, not only because it will deprive you of television entertainment, but also because it will be a further usurpation of freedom of speech. This sort of usurpation, in my opinion, may one day destroy our Constitutional Government.

Only so long as the American people are permitted free expression and are guaranteed equal coverages of both sides of an issue can our freedom be safe.

Once Government abuses its power and permits only good news to be reported by friendly members of the press; once Government prevents renewal of radio and TV station licenses for political purposes, our form of government is doomed.

I hesitate to be an alarmist, but I feel deeply responsible for notifying you, my constituents, of what is in store for you. I propose to do all that is in my power to oppose this plan, though I do not feel optimistic about the chances of prohibiting its adoption.

Benjamin Franklin, when asked upon leaving the Constitutional Convention, "What kind of government have you given us?" replied, "A republic, if you can keep it." How long can we keep our Republic if our freedoms are continually eroded away?

The late President Franklin D. Roosevelt asked the late, great Senator Van Nuys, of Indiana, back in the 1930's to support his plan to pack the Supreme Court and thus usurp the powers of the judicial branch of the Government. He asked for this support regardless of any scruples the Senator might have as to the constitutionality of F.D.R.'s proposal.

In the 1940's, we found ourselves fighting a war, declared by Executive order. Now, in the 1960's, the carrot and the whip are used to usurp congressional prerogatives. This was first done by packing the Rules Committee to get pet liberals bills before the House. Since that time the evidence of additional usurpation has been found on every hand. Congressmen have been the subject of extreme pressure to support measuers actually displeasing to them and large majorities of constituents.

Newspaper reporters are treated with favoritism when they write stories favorable to the administration in the White House. Reports about administration failures are censored by the disguise of "top secret," "confidential," "restricted," and so forth.

In the case of radio–TV control, a much more potent weapon is at hand—the FCC and its director, Newton N. Minow. This agency controls the license of every radio–TV broadcaster in the Nation. It is joining with other Government agencies to control what is broadcast and telecast and to make sure it is favorable to the administration.

Radio stations get daily inquiries from Government agencies asking if administration-slanted radio programs are being used. In this manner the FCC can document the performance of each station. Station managers say they see the handwriting on the wall. Unless they cooperate they fear all sorts of reprisals, including licenses being revoked and heavy fines for the slightest infraction. This has already been done to two small stations who were set up as "examples" for the rest to notice.

Broadcasters are afraid to report the news as they see it for fear of these reprisals. Right in our own State, one U.S. Senator is mailing tape recorded radio programs at his own expense, while another Senator sends tapes to the same stations but actually charges them for their use. These stations don't want to be compelled to use this material and also pay for it. They are doing it, however, because they are afraid of reprisals from the FCC, which is favorable to this Senator because he is of the same political faith as the administration.

Freedom of the press is being abused. Freedom of speech through the media of radio and TV is being abused even more severely. In the very near future we may see this precious freedom become a thing of the past. H.R. 8031, which requires that every TV set manufactured for interstate shipment be capable of receiving all of the television channels, has already been introduced in the House. The proposal to shift all television to UHF channels is already under way under terms of FCC docket No. 14229. The machinery is already in motion. This sort of arrangement is all a Hitler or a Stalin would need to set up a dynasty here in the United States that would supplant our Constitution.

STATEMENT OF HON. FRANK KOWALSKI, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CONNECTICUT

I am Frank Kowalski, Representative at Large from the State of Connecticut. I wish to express my strong support for the enactment of H.R. 9267 and several identical bills pending before this committee.

I have given careful consideration to the television allocation questions before the Federal Communications Commission and am particularly interested in them as they affect the people of my State of Connecticut.

H.R. 9267 and the several identical bills before this committee would enable the Federal Communications Commission to adopt standards having the effect of prohibiting the shipment in interstate and foreign commerce of television receivers unless they are equipped to receive the signals of all television channels—UHF as well as VHF. The bills would also prohibit the Federal Communications Commission from deleting the assignment of a VHF channel made to any community on or prior to September 1, 1961, if the purpose of the deletion was to require all stations in a community to operate on other than VHF channels.

In July 1961, the Commission issued a notice of proposed rulemaking in which it put forward a nine point program of national policy having as its objective a fuller utilization of the entire television spectrum, channels 2 through 83. The Commission pointed out the fact that the present use of the 12 channels in the VFH portion of the spectrum—channels 2 through 13—was virtually saturated, while the UHF channels—70 in number—were largely unused and unoccupied by operating stations. The basic reason for such neglect of the UHF channels, or as the Commission termed it, the "root problem" of the television allocation matters before it, was the inability of most homes in the United States to receive the signals of UHF stations.

Today, only about 16 percent of the 55 million television receivers in the hands of the public are equipped to pick up and reproduce the pictures broadcast by UHF stations. In the absence of receivers in the homes of a substantial number of viewers, entrepeneurs are loath to invest their dollars in the building of UHF stations to telecast entertainment, news, and education to homes blocked out of their sphere of influence.

At the same time and equally significant, the failure of the broadcasters to build and operate UHF stations in appreciable number is an effective deterrent to the acquisition by the public of television receivers capable of bringing into their homes the UHF signals.

To resolve this impasse, the Commission has publicly announced its sponsorship of legislation embraced by H.R. 8031 and by part of H.R. 9267 and other identical bills before this committee which would have the effect of requiring manufacturers to offer for sale only television receivers able to pick up signals from television stations operating in all parts of the television spectrum—UHF and VHF. Since about 6 million television sets are retailed to the public each year, the enactment of the legislation sponsored by the Commission would create over a period of a few years a situation in which the homes of all television viewers would be able to tune in UHF signals, and the operators of UHF stations would be insured of the ability of homes situated in those areas reached by their signals to receive their broadcasts.

I favor the expansion of television broadcasting and the full use of this precious national resource. I consider it essential to take the strong and effective step urged by the Commission as a matter of national policy. It would be absurd to market radio sets and place them in millions of homes which were not equipped to bring in all the 107 frequencies in the AM band. It is equally essential, in our own national interests, to require manufacturers to sell all-channel television receivers since it would bring about the full, rather than the limited, use of the channels specifically tagged for television broadcasting.

The Commission's July 1961 order also proposed to start proceedings (which were initiated on the same date) in eight different markets of the country where VHF stations have been operating for several years looking toward the deletion of VHF channels and the substitution in lieu thereof of UHF channels. This would be only a "start," said the Commission, of "a more thoroughgoing reallocation of channel assignments looking toward providing substantially all-UHF assignments in certain areas of the country." The Commission added: "It is contemplated that, as indicated by further studies and developing circumstances, and in response to further proposals, additional deintermixture proceedings will be initiated in further markets at a later time."

I am greatly concerned about this proposal of the Commission, particularly as it concerns the citizens of my State of Connecticut. Hartford was one of the eight markets selected by the Commission for the deletion of the VHF channel now used by an operating station. It is universally known and accepted that VHF stations render good television service over a substantially wider area than do UHF stations. The kind of topography we have in large portions of Connecticut where the ground is broken into innumerable hills and valleys only emphasizes the disparate coverage of the UHF and VHF stations in our State. Any television plan which would deprive vast numbers of Con-

necticut people of their ability to get good television reception from any television station would work the grossest kind of disservice to the public. Yet, I understand that over a quarter of a million people in Connecticut who have invested millions of dollars in their television receivers would not be able to get good television reception and that another 145,000 viewers would have their present television reception cut down from two stations to only a single station.

My office has been flooded with objections from very responsible citizens to the deletion from Hartford, the capital city of Connecticut, of channel 3. The people of Connecticut have sent thousands and thousands of written protests to the Commisssion urging, in the strongest language, that channel 3 be retained at Hartford so that they can continue to receive news and information of vital interest to them emanating from our State capital. Hartford is the center of news for the entire State, and it would be deplorable indeed if this source of information of immense interest to all of the people of Connecticut were vitiated by the deletion of channel 3. I know from my own experience that channel 3 reaches many thousands of Connecticut homes that would be blocked from television viewing if the channel were deleted. The people of Connecticut have a vital interest in the retention at Hartford of channel 3, and it is unthinkable to me that the Commission would propose its deletion, particularly since on numerous prior occasions when the question was under discussion, the decision has always been that the public interest required the continued use of channel 3 in our State capital. The courts have also spoken on the subject, and when the question was before them, they expressly upheld on appeal the Commission's decision to retain channel 3 at Hartford.

One of the Commission's proposals would move channel 3 to the neighboring State of Rhode Island for use at Providence. Providence, however, already has two operating VHF stations on the air and a third VHF station which will render good service to Providence has been authorized by the Commission and presumably will start operating soon, possibly at a new site which has been applied for and from which location even better service can be given to Providence. The Congress has required the Commission to allocate channels fairly and equitably to various States and communities by the enactment of section 307(b) of the Communications Act. This section would be nullified if the capital of Connecticut were to be deprived of any VHF television channel for the purpose of providing what would be in effect a fourth VHF station for service to Providence. The Commission is an arm of Congress and should carry out the Congress mandate.

Accordingly, as a matter of national interest, I think it plain that the Congress should enunciate by legislation a national policy preventing the Commission from destroying effective and needed television service in those communities where the Commission has already allocated VHF channels. Such national policy would in no way abort the Commission's plan to create a fuller use of the television spectrum by expanding UHF telecasting, but instead would march arm in arm with such policy and serve as an effective complement to it in the overall furtherance of our national interest.

Accordingly, for the reasons which I have expressed, I urge the enactment of H.R. 9267 or any of the similarly worded bills.

Mr. Chairman, I thank you for the opportunity extended to me to make known my views on this important legislation.

STATEMENT OF HON. EMILIO Q. DADDARIO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CONNECTICUT

Mr. Chairman, I am submitting this statement to your committee regarding legislation to require the manufacture of all-channel television receivers. This question is deeply interwoven with recent Federal Communications Commission proposals to deintermix selected market areas and move VHF stations to UHF frequencies. I represent Hartford County, Conn., which is the center of one of those areas, and which contains the State capitol. The Commission has proposed to eliminate television channel 3 which carries excellent public service and entertainment programing to almost the entire State and has offered to substitute a high range channel 76 which would sharply curtail the television opportunities available to the people of Connecticut. I am keenly aware of the

impact which such a transfer of service would have on this State. I have received a great deal of correspondence and I understand that the Commission has also received communications protesting the change.

Hartford has had experience for some time with reception of both very high frequencies and ultrahigh frequency stations. Better than 90 percent of the homes in the county have at least one television set, and almost every set sold in the county by stores and merchandisers is an all-channel set. While there is an added expense to the set owners in purchasing a UHF set, the possibility of alternate choices in his entertainment and enlightenment has encouraged homeowners to secure UHF–VHF receivers.

The possibility of relatively free choice of alternate television service directed to Connecticut tastes would not continue if FCC proposals to take away the VHF service from the capital city are carried out. Many would turn to VHF programing which would continue to be received in the district from other States and other cities. I therefore strongly urge this committee to amend legislation requiring minimum performance capabilities so that it does not permit changes of station allocations solely to carry out the theory of ultimate UHF development. Legislation which would accomplish this is contained in several bills which are also before you at this hearing. Let me say that I am deeply troubled by criticism I have seen that the bill supported by the Federal Communications Commission would grant authority entirely too broad for a regulatory board. I do not believe it was the congressional intention to relinquish all control when it established regulatory agencies in the broad economic areas of such great complexity.

I would agree with the distinguished Chairman of the Commission when he states so eloquently, as he has in the past, that what this country needs is more television, not less. I believe that opening up the ultrahigh frequency field through mandatory manufacture of all-channel sets may contribute to this end. I would support legislation which this committee may approve to achieve that goal. It do not agree that it will take deintermixture of selected markets to reach this end. A judicial assignment of frequencies so that all cities may have adequate choice, using both the 12 VHF channels and the 70 UHF channels, would be the wisest solution.

Let me discuss this with specific reference to the Hartford situation. The deintermixture proposed for this area has been studied before and rejected on several occasions. It would deprive 260,000 Connecticut citizens of any clear television service and an additional 145,000 people would be limited to service from one station. In addition, many thousands who live away from Hartford may prefer VHF stations broadcasting from other States for their entertainment and, in so doing, would be deprived of news and activities pertaining to their own State. In that sense, such deintermixture could do very real damage to the doctrine of States rights by opening a means to provide service based on an economic area solely, and thus blur State lines and boundaries.

I have filed my protest with the FCC in this action in the understanding that the *Hartford* case, like the others, will be reviewed carefully on the particular factors affecting that area. I want to stress for this committee that the urban nature of the area—with 680,000 people in Hartford County alone—and the rugged terrain, low in the valley but ringed with hills and mountains, complicates the question of service to all the people in such a way as to argue against deintermixture. The Commission itself, in an earlier case involving this area—one of the several as a result of persistent efforts by ultrahigh frequenncy to have the FCC withdraw the VHF without regard to quality of service—has noted that it has achieved "a delicate balance in the distribution of services that we have so carefully allocated for this area." It has said that a shift in allocations would result in a less "fair, efficient, and equitable" distribution of such services and the courts have concurred.

The notice of proposed rulemaking which called for the deintermixture of certain selected markets constitutes a strong statement of policy. I believe that Congress must consider such authority carefully before it enlarges it. I would support legislation granting a requirement to build all-channel receivers as necessary to make available to all the people of the United States a rapid, efficient, nationwide television service, but I hold that distribution of facilities to carry out an economic theory is unwise when it works harm on the people who now enjoy outstanding television service from an existing VHF station.

I therefore reaffirm that I would support the Harris bill to require the manufacture of all-purpose, all-channel television receivers if it is amended to pro-

hibit a deletion of channel 3 from Hartford. The language to effect such a prohibition is contained in H.R. 9267 and several other bills before your committee, and I respectfully urge the committee to add such a prohibition to the Harris bill.

STATEMENT OF HON. SAMUEL S. STRATTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. Chairman and members of the committee, I appreciate this opportunity to express my support for H.R. 9349 and to make some general comments on the proposal of the Federal Communications Commission to deintermix various television communities now being served by VHF facilities so as to promote the use of UHF television.

It is my understanding that all of the bills presently under consideration by the committee relate to the Commission's proposal to expand UHF telecasting so as to take advantage of the larger number of channels that are available on this higher frequency.

This is, of course, a laudable objective. It would not only allow additional television stations to operate, and thus provide a more diverse programing, but it might well provide a fresh impetus for educational television programing, which I wholeheartedly support.

However, there is one very serious objection to this proposal which arises because of the very limited range of UHF television. Even if all television receivers were equipped with UHF reception capability, there are thousands of families living 30, 40, or 50 miles or more outside the cities where the stations are located who will be beyond the very limited range of UHF television and who therefore would be deprived of any television reception at all if existing VHF stations were to be eliminated, as the Commission has proposed.

For example, the Commission has proposed to eliminate VHF channel 12 in Binghamton, N.Y., and replace it with one or more UHF stations in that same city. But there are hundreds of families living in a vast rural area, 70 or 80 miles from Binghamton, including Otsego County in my own district, which have no other feasible television reception except channel 12. These rural residents could never receive UHF broadcasting because of the range limitations of UHF as well as because of the rugged nature of the terrain. The proposal of the Commission would therefore discriminate seriously against these rural people in my district, and in Chenango and Cortland Counties as well.

H.R. 9349 would prevent the kind of unfair discrimination which the Commission's plans would involve in these rural and suburban areas of Binghamton, N.Y., all of which have to depend on VHF television out of Binghamton. These people have protested the Commission's proposal to me in overwhelming numbers.

H.R. 9349 would provide the people the relief they deserve and to which they are entitled. I therefore strongly urge its adoption by your committee.

STATEMENT OF HON. EMANUEL CELLER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

The hearings being held by this distinguished committee on a series of bills concerned with all-channel receiving sets as well as the issue of deintermixture looking toward all-UHF areas, are timely and important indeed. These measures bring into sharp focus the question of whether the ultrahigh frequency portion of the spectrum, a major resource that remains largely untapped, can be used to solve the now chronic impasse in visual broadcasting: the inability of the Federal Communications Commission over the years to employ its vast power in the area of television channel allocations to provide a truly nationwide and competitive system of television broadcasting with adequate outlets serving community needs in all parts of the country.

It is this demonstrable failure in the exercise of regulatory authority that prompted me to introduce H.R. 10385, which provides for an orderly transition from VHF transmission to all-UHF transmission over a 6-year period. I shall review briefly the salient features of this legislative proposal, including its relation to the other bills which the committee has under consideration.

In these hearings, the committee has again heard authoritative testimony about the critical shortcomings in the service provided by the current pattern

of allocations and assignments in the Nation's television markets. However, the task at hand is no longer to catalog the symptoms or to diagnose the illness that afflicts the industry; rather the problem is to prescribe an effective and workable remedy while there is yet time—and time is, in my view, rapidly running out.

The perspective of the past 10 years gives small comfort to those who urge that the country can continue to afford the luxury of experimenting first with one set of half measures and then another, if the first approach is found wanting. Experience has taught that, in this dynamic field, the point of no return lies dangerously close to the threshold of experiment. What is projected as a test or trial too frequently turns into a commitment that is irrevocable because of the substantial interests and irresistible pressures that have been fostered. Mistakes are peculiarly costly, and all but irremediable.

I have a great respect for the able Chairman of the Federal Communications Commission but I must take issue with him when, in recent testimony before this committee, he takes the position that "if years from now we find we don't have a competitive service for the country then this"—conversion to all UHF—"is one solution that I am sure we have to consider." I am convinced that any attempt to consider this or any other far-reaching solution some "years from now" would be an academic exercise in futility. The issue will have been foreclosed.

This conclusion is, in my judgment, compelled by an analysis of the present state of affairs, in the light of the significant television history of the past decade. Let me touch briefly upon the highlights in terms of facts and figures about which there is little disagreement.

Recall the familiar consequences of the Federal Communications Commission's 1952 error in intermixing UHF broadcasting with VHF saturated areas. No single decision in the history of the Commission has proven "so catastrophic," according to Commissioner Robert E. Lee. By forcing UHF stations, which were then authorized for the first time to commence commercial broadcasting, to compete with VHF stations that had become solidly entrenched during the prior 4-year "freeze" on station applications, the Commission virtually doomed this new method of broadcasting at its inception. The error was soon recognized, but as this committee has good reason to know, the Commission is still wrestling with the problem today. Obviously, the reason for the Commission's long standing failure to provide an effective remedy was its desire to avoid dislocating profitable VHF stations, in whose shadow UHF stations could not survive.

Some 5 years ago, the House Antitrust Subcommittee, of which I am chairman, had this to say in its report issued after a full dress inquiry into monopoly problems in the television broadcasting industry:

"* * * although from the beginning the Commission laid down clear perspectives for a nationwide and competitive system and declared the wide use of the ultrahigh frequencies to be essential, for many years it not only failed to encourage the development of UHF broadcasting but, on the contrary, its every action and inaction—the 4-year freeze, the deadly intermixture provisions of the 1952 report and order, the failure to stimulate all-channel set manufacture, and the vacillation with respect to deintermixture—further strengthened and entrenched VHF. The result is that in so-called intermixed areas, where UHF stations must compete with established VHF stations, they face an almost insuperable disadvantage. * * *

"* * * the Commission has recently embarked on a long-range program looking to the possibility of shifting all or a major portion of television broadcasting to UHF, and also on an interim program of selective deintermixture on an area-by-area basis. The committee believes that the Commission can, and must, remove this fundamental obstacle to the realization of congressional objectives for the broadcasting industry. * * *."

After taking cognizance of the alarming mortality rate suffered by UHF stations in the years following the inception of the Commission's 1952 allocation plan and the enormous capital losses entailed in these station failures, the subcommittee concluded:

"* * * the disappearance of UHF broadcasting would mean more than financial loss to station licensees. It would frustrate the achievement of a nationwide and competitive television system for the foreseeable future. First, it would mean that the objective of diverse, multiple-program sources in as many communities as possible would have to be abandoned. For if television is

limited to VHF there are simply too few available frequencies. Most American communities would have to give up the idea of ultimately having their own local television stations for the discussion of local problems, the dissemination of local news, and the development of local talent.

"Second, the failure of UHF television would sound the death knell of educational television. * * * Development of this new dimension in education clearly depends upon the survival of UHF.

"Third, the loss of UHF would mean still further concentration of power in the television industry by making it impossible for more than two truly nationwide networks to flourish.[1] The inadequacy of VHF alone to supply sufficient outlets for a fully developed system, which the Commission has repeatedly reaffirmed, is graphically illustrated by the VHF assignments made in the allocation plan. * * *."

Consider that 5 years, marked by surging economic and population growth, have elapsed since these recommendations were advanced. Now, consider the "progress" report submitted in June of 1961 by the Federal Communications Commission in response to the Antitrust Subcommittee's request "to be appraised of actions that have been and are being taken by the FCC to carry out the subcommittee's recommendations." The distinguished Chairman, Newton N. Minow, then but recently appointed, testified on this score:

"* * * In recent years, as it has become clearly evident that UHF could not compete effectively in areas where there were multiple VHF services, the Commission has devoted a considerable portion of its time and efforts to solution of the allocations problem. One by one we have been forced to narrow the alternative approaches. It is impossible, for example, to have a competitive television system adequate for the Nation's growing needs in the commercial and educational fields within the confines of 12 VHF channels. * * * It becomes more evident as time goes by that, unless demand for UHF can be revived, our television system will have no room in which to grow.

"The Commission is keenly aware of the problems such limitation creates. The existence of monopolistic markets with one or two VHF stations; the lack of sufficient competitive outlets for a third network; inability to provide for the needs of an additional network or the major nonnetwork program suppliers; the lack of outlets for local community expression; and scarcity of facilities for educational needs in the larger markets—these are serious indications of the shortcomings of a restricted television system."

I raise no question as to the good faith or good intentions of the Chairman of the FCC when he affirms that the Commission will continue "to press for full UHF utilization" and is hopeful that "the future expansion in television broadcasting will, in time, move into the UHF band." However, apart from a reaffirmation of worthy objectives, the Commission's status report is no more than a point-by-point reiteration of the Antitrust Subcommittee's analysis and call to action which was issued in June of 1957. To emphasize in the year 1961 that the Commission is "keenly aware of the problems" involved is to suggest at the same time that little encouraging progress had been made toward their solution in the critical years gone by. I draw this parallel not to belabor past omissions or errors, but to underscore their clear lesson with respect to the future.

In practical terms, what does a present-day inventory of the state of UHF broadcasting show? As this committee has been informed, some 100 UHF licensees in all have failed and gone off the air. The staggering losses incurred in both money and effort stand as an object lesson to others who would be tempted to risk their capital in such a venture. In 83 areas where 1 or more UHF stations once operated, their signals are silent. Of these areas, 25 are now without any local station, including such cities as Allentown, Pa., Atlantic City, N.J., and Battle Creek, Mich. And as Commissioner Lee has informed this committee, in view of their competitive inequality, "only in a few limited markets where VHF is curtailed or nonexistent is there any expectancy that the UHF stations can continue to operate much longer."

Sixteen hundred out of over twenty-two hundred television channel assignments made by the FCC remain unused. Significantly, over 1,400 of these are in the UHF band. Indeed, only about 100 out of a total of over 1,500 UHF channel assignments—or about 7 percent—are currently in use, and 18 of these are educational television stations. It is estimated, moreover, that of the some

[1] Since this report, a third nationwide network has entered the field with vigor.

55 million television sets now in use, only 9 million are equipped to receive UHF as well as VHF broadcasts. It should be added in this connection, that only 6 percent of the new sets produced in 1961 were equipped for UHF reception as compared with 20 percent of the new receivers manufactured in the year 1953.

This overall picture has not been visibly brightened by the results thus far of the Commission's pursuit of selective deintermixture. Suffice it to say that this program—and I do not minimize its inherent difficulties—has in the past been attended by regulatory vacillation, procedural snarls, and intense opposition in certain quarters. Since 1957 three areas in the entire Nation have emerged on an all-UHF basis as the result of deintermixture, while eight major cases are presently lodged with the Commission. While our Antitrust Subcommittee unanimously endorsed a more vigorous deintermixture approach as a step in the right direction (at that time, the subcommittee had no other choice), this technique clearly holds no great promise as a long-range solution nor does the Commission itself regard it in this light.

In the same vein, I have, along with the other members of our Antitrust Subcommittee, long been on record as an advocate of legislation to promote all channel receiving sets, a measure which recently received the endorsement of the President in his message on "Protecting Consumer Interests." Certainly the FCC should be authorized to prescribe the performance characteristics of all new television receivers shipped in interstate commerce to assure that they can receive both VHF and UHF signals. Granted, however, that the removal of receiving set incompatability would have constituted a long stride forward in the early days of UHF operation, today it will only lessen the heavy odds against UHF broadcasting. I note that the Chairman of the FCC, in advocating passage of the all-channel bill, told the committee that its enactment would encourage UHF broadcasting and that "time would start to run in its favor." However, Chairman Minow went on to warn:

"We do not mean to imply that passage of the all-channel legislation will necessarily insure survival of all UHF stations now struggling against VHF competition. The question of whether a particular UHF station will survive will doubtless depend on a great many circumstances, particularly the economic viability of the station at the present time."

This brings me to my central thesis. We must, in my judgment, face up to the inescapable fact that television today stands at the crossroads, where the choice is either to maintain the present allocation system and thus permanently freeze the status quo of 12 VHF channels—with the monopoly dangers and stifling of local expression inherent in such stricture—or to shift to all UHF under a plan designed to minimize the transitional strain so that some 70 UHF channels may be utilized in the broader public interest. Here there is no easy middle ground—as was the case when this country launched its missile and space program when there was still enough leadtime to meet the Soviet threat.

I believe further that, in view of the negative position in this matter of a majority of the FCC, Congress must grasp the nettle. Our action or inaction on this issue in the coming months may go far toward fixing the pattern of the industry for a long time to come.

To meet what I conceive to be no less than a crisis in the use of the radio spectrum, one of our invaluable natural resources, my bill provides for an orderly and gradual transition from VHF broadcasting to the UHF band. While I am not wedded to the language of H.R. 10385, I believe that it does constitute a sound approach, worthy of the most careful and intensive study by this committee and by the Congress.

Under my bill the FCC would grant no more VHF channel license assignments, and would promptly assign and grant a UHF frequency channel to each existing holder of a VHF license. Licensees would be authorized immediately to broadcast simultaneously over both bands. However, after 2 years or after the expiration of a licensee's present broadcast license, whichever occurs later, he would be required to broadcast on both the VHF and UHF frequencies. Finally, at the expiration of 6 years all VHF broadcasting would cease. The Commission would be required, as far as possible, to restrict new assignments to the lower 40 channels in the UHF, which are known to provide the best UHF reception.

Beyond this, the Commission would be dutybound to inform the public at large that no existing receiving set would become obsolete by virtue of this enactment

within 6 years, but that at the expiration of that period VHF broadcasting would cease.

H.R. 10385 would minimize the cost of reconversion for the television viewing public, whose VHF sets would remain operational for 6 years, the average life expectancy of a receiving set. It would also minimize the reconversion burden on broadcasters, by giving them a 6-year period in which to convert to the UHF band. In this connection, the feasibility of a tandem or dual operation on both VHF and UHF frequencies by the same station has been successfully demonstrated by a licensee in Fresno, Calif., who advantageously operated in this fashion for a period of 3 months under FCC authorization prior to converting to all UHF.

I need hardly remind this committee that if the VHF band is vacated by the commercial broadcasters, it can be quickly absorbed by a host of other pressing and vital needs. The mobile radio services, as Commissioner Lee emphasized in his testimony, are being more and more tightly jammed into a narrow segment of the spectrum. This congestion, of course, makes for serious interference and disruption. An itemization of only a few of the nonbroadcast services, which require accommodation, shows at a glance their importance to the public welfare and economy: Medical and biological telemetering; police and fire protection; and communication in such industries as forestry, heavy construction, and electric and gas utilities.

I think it fair to say that according to the present consensus in expert circles, UHF broadcasting has come of age from a technical point of view. Because practical telecasting began in the VHF band, the technology of VHF broadcasting was bound to outstrip that of the younger UHF service in development. There is, however, good reason to believe that the gap is being and will be closed.

To begin with, from the standpoint of the viewing audience there is little to choose between the propagation characteristics of the 2 methods of telecasting. In fact the Chairman of the FCC has, in the course of these hearings, stated that the Commission engineers regard UHF transmission as superior to VHF in some respects. The UHF picture on the receiving set is described as "crisper" or "clearer" because there is less manmade electrical interference and cosmic noise in the UHF band; also, UHF telecasts are relatively free of disturbance by airplane flutter. Beyond this, there is less difficulty with "ghosts" in the UHF picture, because it is easier to construct highly directional receiving antenna for UHF frequencies.

As this committee knows, a unique and highly ingenious experiment is now going forward under FCC auspices in the complex surrounding Manhattan in New York City, calculated to obtain a precise comparison between the reception quality of UHF and VHF signals in a city cut through by artificial "canyons" like New York. To this end, a high power UHF station, under the management of the city of New York, is broadcasting from a specially constructed antenna on the Empire State Building. The UHF programs transmitted for a part of the day duplicate those telecast by the VHF stations operating from the same tower.

The returns thus far from viewer surveys that appear to be a model of objectivity, show that there is no significant difference between the VHF and UHF signals within a 25-mile radius of the Empire State Building. Of added interest is the fact that privately employed technicians who have been making a like comparison of the two signals in what is perhaps the worst propagation area in the entire country—the lower two-thirds of Manhattan—have come forward with the same findings. These encouraging results, I might point out, not only affect my own district in Brooklyn, but I am told that good UHF reception has also been reported from the Holland Tunnel, in the event anyone wishes to set up housekeeping there.

Furthermore, while I do not wish to pursue the matter at length here, perhaps too much has been made of the fact that the VHF signal has a greater range than UHF. As Commissioner Lee has pointed out, "contrary to popular conception, this difference does not result in greater service," but rather "this increased range carries with it the potential of increased interference between stations." Again, according to Commissioner Lee, with appropriate antenna heights and radiating systems, UHF stations would be able to serve viewers out to 44 miles—a range which compares favorably with the same quality of service rendered by VHF stations in many areas and augurs well against any loss in service.

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Nor is the present estimate of UHF performance characteristics confined to the abstract or experimental realm. Successful UHF operations are familiar on a day-to-day basis to the citizen of such cities as Fort Wayne, South Bend, and Elkhart, Ind.; Peoria, Ill.; Wilkes-Barre and Scranton, Pa.; Lima, Zanesville, and Youngstown, Ohio; Fresno, Calif.; Springfield-Holyoke, Mass.; Yakima, Wash.; Lexington, Ky.; and Elmira, N.Y.

So much for the technical side. On the human side, it is always the easier course to postpone a critical decision that will provoke resistance in some quarters, particularly when this procrastination can be rationalized as mere judicious postponement. But as veteran members of the FCC have good reason to know, the passage of time without solution aggravates the ultimate impact of changes in regulatory direction.

The acceleration of our economic expansion, consumer demands, population boom, and extra leisure time, which marks the decade of the 1960's, has resulted in the expenditure of over $1½ billion annually on advertising through the medium of television. What the increase will be in this figure a few years hence, I leave to the speculation of the market analysts. One thing, however, is certain. Unless a plan to convert to a UHF system—such as the graduated one I have outlined—is adopted reasonably soon, the entrenched elements that will unalterably oppose any switch from a VHF system will be well nigh immovable.

In summing up, I refer you to the following statement:

"* * * the failure of our television system stems from the failure of UHF broadcasting to develop as had been expected. Moreover, it is clear that unless it is to be the decision of the country to settle for the present limited systems, we have no place to go except into the development of the 70 UHF channels which are practically lying fallow."

These are not my words but those of the present chairman of the FCC.

I am aware of no disagreement on the part of any of the Commissioners that the FCC has exhausted and found unavailing several alternative solutions seeking additional outlets by expanding the number of VHF channels allocated for television broadcasting. To take one example, the Department of Defense, has announced that it could not, in the national interest, relinquish any of its VHF space. In short, the door to VHF expansion is closed.

But the vista of the broad UHF band is open. Clear statutory authority to convert to an all-UHF system at any time is possessed by the FCC. However, six of the seven Commissioners have gone on record against adopting this solution for the present. It can, therefore, only be available of through congressional mandate. I commend this course of action and the features of my bill to this committee. The time for decision is now.

STATEMENT OF HON. HENRY S. REUSS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WISCONSIN

Mr. Chairman, the average family in the United States of America spends, I am told, an average of 5½ hours daily in front of a television set. I have come here today in support of H.R. 8031, legislation which would materially benefit this average family by increasing the quality of the product which is available during those hours.

Specifically, Mr. Chairman, this legislation would require all TV sets imported into the United States and all sets manufactured for shipment in interstate commerce to be built in such a fashion that they can, without further adaptation, receive all of the channels now open for allocation by the Federal Communications Commission.

This means that the average American family would own in the future a set which would receive the 70 channels on the ultrahigh frequency spectrums in addition to the 12 channels which can now be received on the average set which gets only very high frequency.

COMPETITION AN AMERICAN STRENGTH

Throughout our history this Nation has grown great and has become one of the strongest nations on earth because of our basic faith in the free enterprise system and in the competition which it stimulates among individuals and firms. Competition forces the producer or seller of a product to offer the best he can in the interest of winning the allegiance of the consumer in the marketplace. This "best" must continually be improved through fear of losing the market to a more

enterprising competitor. These considerations which have led us to have some of the highest quality manufactured products in the world, apply equally well to television. More competition in the field of television broadcasting will bring to the United States a much higher quality of program than he now receives.

However, the extent to which this ideal system of competition can operate in the field of radio or television broadcasting is somewhat limited by the nature of the medium. Specifically, the FCC and its governing statutes set strict limits on "entry" into the television broadcasting business because of the finite limit on the number of frequencies which can be reasonably used in a given geographical area. Moreover, the present situation in the United States is such that this limited market is limited even more for reasons which can be changed by the enactment of this legislation.

The pragmatic effect of current practices is to deprive the American public of a high proportion of television alternatives which might be opened to them.

PRESENT PRACTICES

There are today in the United States 55 million television sets. This is so many that more houses have television sets than have indoor plumbing. And yet only 9 million, or 16 percent of these sets, are capable of receiving UHF channels which we shall see in a moment offer the only hope for the future expansion of American television.

And further, the situation is a rapidly deteriorating one. Every hour of every business day some 6,000 television sets are sold in the United States. Only 6 percent of them are equipped for UHF. In 1953 some 20 percent of sets sold were so equipped. In short, 94 percent of the sets being offered to the American people today are sets which completely cut them off from the wonderful new world of UHF.

CHANNEL ALLOCATION

The effect of the practices outlined above is that 94 percent of the people are cut off from that one spectrum of the TV band which holds hope for future expansion. In order to see this clearly we must see just what channels are now open for allocation by the Federal Communications Commission.

As a basis for this examination, I offer at this point a table on the present status of channels in the United States. This information is taken from section 3.606 of the rules and regulations of the Federal Communications Commission and is known as the table of assignments.

Table of assignments

	Channels now assigned	Channels available for assignment		Channels now assigned	Channels available for assignment
Total VHF	500	181	Total UHF	103	1,441
Commercial or non-reserved	458	130	Commercial or non-reserved	85	1,270
Educational	42	48	Educational	18	170

A quick examination of this table supports the opinion I have previously voiced that the real room for expansion and for competition in the television broacasting industry lies in the UHF spectrum where there are 1,441 unassigned channels compared to 181 unassigned VHF channels.

NEED FOR PARITY

These stations will never be developed until there is real parity in the United States for the UHF stations, and their potential developers know that they have a fair chance to reach and compete for a reasonable segment of the American viewing public. The economics of the industry is such that a station which can only reach 6 percent of the sets in its geographical area has a very difficult time.

History shows that this is true. Some 100 UHF licensees have folded up because of economic difficulties. This has taken one or more UHF stations from 83 cities and left 25 of them without any local station at all. It is time to

reverse this trend away from UHF and start a trend toward it and toward the expansion of the quantity and quality of American television broadcasting.

EDUCATIONAL TELEVISION

One of the great potentials of television which the passage of this legislation will encourage is its use as an instrument of education. On March 7 the House passed H.R. 132 authorizing a $25,520,000 program of matching grants to the States for the development and construction of educational television facilities. If they are to make maximum use of these facilities and to reach the maximum number of people with the programs which they will offer it is essential that this whole UHF spectrum be opened up. With the passage of H.R. 8031 the educational TV network which H.R. 132 envisioned will have an ever-increasing audience instead of an ever-decreasing one. Everything we can do, Mr. Chairman, to increase the educational level in the United States is vitally important to our continuing success. I urge the committee to do the necessary.

STATEMENT OF HON. NOAH M. MASON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. Chairman and members of the committee, I am Noah M. Mason. I represent the people of the 15th District of Illinois in the House of Representatives. I strongly support the principle of all-channel receiver legislation of a proper kind as a means of opening the way toward greater development and expansion of our television system. Since there is little or no room left for expansion of television on the 12 VHF channels, it is necessary that this expansion take place on the 70 UHF channels. Passage of appropriate all-channel receiver legislation—that is, legislation which would give the FCC power to require that television sets be able to receive stations on all 82 channels—would encourage this development because potential broadcasters would know that there would come a time when new UHF stations would be sure that the public would be able to view their programs.

One thing concerns me about giving this power to the FCC, however. It is that if all-channel receivers are widely distributed, the FCC might at some future time use the fact of this wide distribution as a justification for shifting some or all VHF stations in the country to UHF channels.

This is no idle worry. The FCC already proposes to take away the VHF station in Rockford, Ill., and make it a UHF station. Many people in my district view the Rockford VHF station. Many of these people would lose its service if the Rockford station were made UHF. The FCC is threatening similar action in seven other cities. All these actions were instituted very shortly after the FCC requested introduction of its all-channel receiver bill, H.R. 8031. In its public notice starting these deintermixture proceedings, the FCC made repeated references to all-channel receiver legislation. The connection between the two in the FCC's mind is obvious.

The FCC has clearly stated that the eight proceedings it has now pending to eliminate VHF stations are just a beginning, and that more such proceedings are yet to come. The only logical end of this process is the total elimination of all VHF television throughout the country. This would be a catastrophe for people in suburban, rural, and semirural areas such as a large proportion of the people of my own district.

I therefore strongly support all-channel receiver legislation of the sort represented by H.R. 9267 and its companion bills, and oppose the FCC's bill, H.R. 8301, unless it is amended to prevent the FCC from destroying some or all of our VHF service by shifting VHF stations to UHF.

STATEMENT OF HON. HOMER E. CAPEHART, A U.S. SENATOR FROM THE STATE OF INDIANA

I urge that the committee report favorably a properly restricted bill, conferring power on the Federal Communications Commission to require that television sets shipped in interstate commerce be capable of receiving all 82 VHF and UHF television channels.

I am sure it is not necessary for me to go into detail with respect to the importance of all-channel set legislation to the future growth and development of American television. We have a magnificent system of television in this country today. Almost everyone in the country has television service, usually from two or three stations or even more. Nevertheless, we must look forward to even further growth and development of our television system, both commercial and educational, over the years ahead.

That growth will have to take place almost entirely in the 70 UHF channels because the 12 VHF channels are practically used up. But UHF stations have had a slow development. The main cause of this slow development has been the fact that relatively few homes have had television sets capable of receiving the 70 UHF channels as well as the 12 VHF channels. All-channel set legislation will solve this problem. If the Congress gives the Federal Communications Commission power to require that television sets imported into the country or shipped in interstate commerce be able to pick up both the VHF and the UHF channels, then within a few years most of the people in the country will be equipped to receive UHF stations, and the way will be open to appropriate further development of American television.

There are two ways the Congress could go about the enactment of all-channel set legislation. One way is embodied in the bill the FCC itself has proposed, S. 2109. That bill would give the FCC very broad, apparently almost unrestricted, power to set up minimum performance capabilities for television receivers. The other way is embodied in proposals such as H.R. 9267, H.R. 9277, and several other bills which have been introduced in the House of Representatives. Those bills would carefully define the power conferred by the Congress on the FCC to extend only as far as is necessary to solve the specific problem before us, and would make it very clear that the power conferred is not to be used by the FCC in an undesirable way.

I strongly favor the second course.

First, any all-channel receiver legislation adopted by the Congress should clearly specify that the power being conferred on the Commission is the power to require that television sets imported for resale or shipped in interstate commerce be capable of receiving all 82 VHF and UHF television channels. No other minimum performance capabilities have anything to do with the problem the Congress is seeking here to solve, and the Congress should not confer any such wide powers on the FCC.

Second, and more important, the Congress should make it absolutely clear that all-channel receiver legislation is not to be used as a vehicle for shifting the licensed television stations of the country from VHF channels to UHF channels. The FCC has pending before it at this time eight different proceedings in which it proposes to make cities all-UHF by requiring existing VHF stations to shift to UHF channels. It has said that it intends to make even more cities, and perhaps whole areas of the country, all-UHF in the future. Indeed, there is no assurance that it might not shift all the television stations in the country to UHF and wipe out VHF television broadcasting altogether.

Any such all-UHF policy, whether in selected areas or nationwide would be a body blow to the fine system of television we have developed in this country, because it would destroy a very substantial portion of our existing television service. UHF stations are short range as compared to VHF stations. Whenever a VHF station is made UHF, therefore, people in outlying areas lose the station's service. If all VHF stations in a wide area were made UHF, great numbers of people in outlying areas would lose service. If the whole country were made all-UHF, millions of families would lose television service. And, of course, the people who would be hit hardest would be the people in the suburbs, in small towns, and on farms—just the people who are most in need of the entertainment and instruction that television provides.

The power to prescribe all-channel sets could be used as a weapon to further this destructive policy if it were not carefully controlled. It would be possible for the FCC to use this power to put UHF sets in the hands of the public, not for the purpose of unlocking all the television resources of the Nation, but for the purpose of easing a transition to all-UHF. This must not be allowed to happen. It is vitally important that the all-channel receiver legislation adopted by the Congress make it absolutely clear that the power given to the FCC is not to be so used. I therefore strongly urge the enactment of all-channel receiver legislation, such as, for example, H.R. 9267 now pending before the House of Representatives, which will make it clear that the FCC is not to tear

down our television system by shifting VHF stations to UHF channels for the purpose of making cities, areas, or the whole country all-UHF.

So that there can be no misunderstanding, I do not take this position in connection with any case that is under adjudication before the FCC. Specifically, my views do not apply to the situation in Evansville where channel 7 has been earmarked for a move for a very long time. The legislative decision in this case was made some years ago. What concerns me is future legislation, or rulemaking, decisions. I think it is proper for me to express my views on such matters, while I should be reluctant to do so as to cases under adjudication.

I accordingly strongly urge the favorable report of a bill empowering the FCC to prescribe that television sets be able to receive all VHF and UHF channels, and making it clear that the FCC is not to begin any new proceedings to shift any new areas to all-UHF.

STATEMENT BY HON. JAMES H. MORRISON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF LOUISIANA

Mr. Chairman and gentlemen of the committee over the past few years there have been many who have advocated various means of encouraging the development of telecasting in the UHF portion of the spectrum. In this connection, there is substantial support for legislation requiring that all television receivers shipped in interstate commerce be capable of receiving signals in both the VHF and UHF bands. In addition, great pressure is being brought to bear against the Federal Communications Commission to remove all commercial television stations from the VHF portion of the spectrum. In my opinion, there is much to be said for the position that the public interest will be served by encouraging the further development of telecasting in the UHF band. This is particularly true in areas which are not receiving adequate television service and apparently cannot, if telecasting is limited to the 12 VHF channels presently allocated. However, it is my conviction that if, by Commission action or by legislation, all commercial television stations are required to be moved from the VHF portion of the spectrum, the consequences will be disastrous to the viewing public. The situation in Louisiana is quite apt.

Attached are two maps (maps in committee files) illustrating the areas where persons presently receiving television service would be deprived of that service if existing VHF stations were required to move to the UHF portion of the spectrum. It is obvious that tremendous numbers of people in Louisiana would be deprived of service. The only way that this service could be replaced would be by the allocation of additional UHF channels to the outlying areas now being served by the VHF stations, which stations would either have to be operated by residents of local communities, or as satellites of the nearby metropolitan stations. In effect, these additional UHF facilities would, in all likelihood, have to form a ring about the present VHF stations in order to replace the lost service.

It is questionable whether these additional UHF stations could be operated as independent stations by residents of the rural communities, since there would not be a sufficient base to support service comparable to that now being rendered. As documentation of this fact, when a VHF television channel was allocated and assigned to the community of Houma, the station was not constructed and every attempt was made to move the channel either to New Orleans or to Baton Rouge.

If these additional UHF channels were licensed to stations headquartered in the metropolitan areas and operated as satellites, it would take five, six, or seven UHF channels to substitute for one VHF channel, and the relative advantage of the UHF spectrum, in terms of abundance of channels available within it, would evaporate. The number of channels required to restore presently existing service would be so great as to leave few, if any, available for the expansion of new forms of television service in the years to come.

Furthermore, the quality of service now rendered by the metropolitan VHF stations in our State would doubtless be impaired. Either their economic base would be reduced, in the event their service area were curtailed, or the expense structure would be overburdened by the necessity of building and operating multiple transmitting plants in place of one. A reduction of income, or increased pressure on expenses, would doubtless bring about the same result: a reduction in the metropolitan station's ability to render service equivalent to that of today.

It is for these reasons that, while I do not oppose, and, in fact, favor legis-

lation that would encourage the development of telecasting in the UHF band by the requirement that all television receivers shipped in interstate commerce be capable of receiving signals in both UHF and VHF bands, I strongly oppose any administrative or legislative requirement that all television, including present VHF television, be transferred to the UHF band.

(The accompanying maps may be found in the committee files.)

STATEMENT OF HON. GORDON H. SCHERER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

Mr. Chairman and members of the committee, I am Gordon H. Scherer, a Member of Congress for the First District of Ohio. I am here to urge the committee to give a favorable recommendation to legislation in accordance with such bills as H.R. 10219, of which I am the sponsor, and its companion bills, H.R. 9267 and others. Such legislation would remove a serious stumbling block to the further development of our television resources in the most effective manner. At the same time, such legislation would preclude misuse by the FCC of power to regulate television receivers.

Power over sets would be misused if it were used to implement a program of substituting UHF television service for VHF television service in selected cities, entire areas, or even from coast to coast. In giving power over sets to the FCC we certainly must not place the public in a position in which, after the people in the country acquire all-channel receivers, the FCC could use that fact as justification for shifting VHF stations to UHF. This would be strongly contrary to the public interest. Many people in outlying districts would be deprived of television service, because of the shorter range of UHF.

Substitution of UHF for VHF service is so disruptive, especially to service enjoyed by smalltown and farm families, that I do not see how the FCC can seriously consider a program of this nature. Nevertheless, the FCC is at this moment considering doing so in eight different places, and has stated its intention to extend this program. As I read the Commission's public notices there is even a real danger that some day all our VHF television service might be wiped out throughout the country, either through a creeping process of this so-called deintermixture or by a wholesale shift of all television to UHF.

I am strongly in favor of properly developing the UHF channels. I therefore favor the principle of all-channel receiver legislation, as is evident from my bill, H.R. 10219. But UHF service must be developed side by side with our fine VHF service and not as a substitute for that service.

I therefore ask that the committee report favorably a bill such as my own bill, H.R. 10219, or one of its companion bills such as Representative Roberts' bill, H.R. 9267, which will confer appropriate power on the FCC to require that television sets receive all VHF and UHF channels, but would also put appropriate limitations on this power to prevent its misuse.

In any event, one thing is plain. If the Congress should decide not to grant the all-channel receiver power which the FCC has requested, this will be a clear mandate to the FCC not to attempt to do the same thing indirectly by shifting cities, areas, or the whole country to UHF.

STATEMENT OF HON. JOHN M. SLACK, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WEST VIRGINIA

Mr. Chairman and members of the committee, I am John M. Slack, Jr., a Member of Congress for the Sixth District of West Virginia.

I wish to add my voice to the many others in support of legislation such as the Roberts bill, H.R. 9267, and companion bills which are before this committee. These bills would perform the two highly desirable functions of paving the way for efficient development of all our television resources while at the same time preventing any extension of shortsighted policies such as "deintermixture" of cities or whole regions from VHF to all UHF—and perhaps even the elimination of all our wide-area VHF television service.

It is important for us to bear in mind the vital role that television plays in our total economy. The wide-area television service of a station in one city can knit together an entire area into a single market. Merchants in a central community

can tell the people of a wide area about the goods they have to sell. This makes for prosperity in the whole region. But this kind of television service is possible only on the VHF channels, because UHF stations do not reach people in outlying areas remote from the community where the station is located.

Several recent actions on the part of the FCC, with which the committee is familiar, raise a serious question as to whether the FCC might not plan to shift all or a great part of our television to UHF, thus eliminating much of the economic benefits of wide-area service. Therefore, while I think it is desirable to confer on the FCC the power to prescribe that all television sets in interstate commerce be able to get all 82 channels, I also think it is essential to limit this power so as to prevent the FCC from using it to shift part or all of our television to UHF.

Of course, if the Congress desires not to confer on the FCC even a carefully restricted power to prescribe all-channel sets, it will then be clear that the FCC is not to force UHF sets on the public by shifting VHF television to UHF, thus doing indirectly what the Congress refuses to authorize them to do directly.

I therefore strongly support legislation such as H.R. 9267.

STATEMENT OF HON. OTTO E. PASSMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF LOUISIANA

Mr. Chairman, I am pleased to have this opportunity of presenting to you an outline of the position of the Louisiana Association of Broadcasters with relation to VHF and UHF telecasting. As explained to me, this position is stated briefly as follows:

Fundamentally, the structure of telecasting in the United States is built upon stations operating in the VHF portion of the spectrum. Conclusions, after years of engineering study, are that the propagation characteristics of UHF telecasting will not permit signals to be received satisfactorily for distances anywhere nearly approaching the capabilities of VHF signals. Therefore, it seems that it must follow that if all stations are required to go to UHF telecasting, many persons would be deprived of television entertainment and information which they are now receiving.

It has been suggested that by moving all television to the UHF band, stations could be established in small communities that do not now have a local outlet. The telecasters of Louisiana are of the opinion that this reasoning is fallacious, contending that these small communities could no more provide the required support for a UHF station than for a VHF station. Their experience has been, as a matter of fact, that it costs more to operate a station in the UHF band than in the VHF band. Consequently, it is concluded that any such UHF stations either must fail because of a lack of economic support or become satellites of stations in larger metropolitan areas; and, in either event, the result would be a degraded service, increased costs, and poor quality programs.

I am confident, Mr. Chairman, that this committee will give careful consideration to the views on this matter of the Louisiana Association of Broadcasters.

I thank you again for the privilege of presenting this statement.

STATEMENT BY HON. LEONOR K. SULLIVAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSOURI

Chairman Harris and members of the committee, as a Member of Congress from St. Louis, representing a district located wholly within the city of St. Louis, I am most anxious that nothing be done in the form of a legislative enactment which would have the effect of interfering with the continued operation of one of our St. Louis television stations. To my mind—and I think most of you agree—it is up to the Federal Communications Commission to allocate channels and to supervise and regulate the industry as provided for under law. It is not within the province of Congress, I believe, to decide where a particular station should be located, since this is authority the Congress decided many years ago belonged in the hands of the appropriate regulatory agency.

Following disclosure of the fact that legislation was to be considered which would have the effect of taking away a St. Louis television station and awarding the channel to another city, I asked competent experts to prepare for me a state-

ment giving the essential facts as they related to our right to continue to have channel 2 in St. Louis. It is rather technical and incorporates legal arguments that certainly deserve to be considered, and I submit this statement as my statement, while acknowledging that I, personally, am not expert in the technical and legal points it makes.

But I do know this—I am an expert on this fact:

St. Louis was immediately aware of the great opportunities for public service and public education, as well as entertainment, in the development of television broadcasting, and took advantage of every possible opportunity to expand facilities and bring good television service to our Greater St. Louis area. We should not now be punished—penalized—for this.

Furthermore, in addition to business acumen and business courage in investing in television facilities, it is worth noting that our university people and public-spirited citizens generally united and worked hard to establish an effective educational television station, one of the first and most effective such stations in the country.

So, we are aware of the potential of television, and we are proud of what St. Louis television has accomplished.

So, I urge that in considering legislation now before you dealing with television, the committee does not set itself up as a super FCC, to decide issues properly before the FCC as to location of channels and stations.

Mr. Chairman, I now submit the statement which I have had prepared for me which goes into the technical and legal points in connection with our position in this matter, as follows:

SUPPLEMENTARY STATEMENT OF HON. LEONOR K. SULLIVAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSOURI

Thank you, Mr. Chairman, and members of the committee.

As a Representative for the Third Congressional District of Missouri, which includes much of the city of St. Louis, I am very much concerned about any move to arbitrarily deprive my constituents of the television service they are now receiving on channel 2. I have the following points to make:

1. St. Louis is clearly of sufficient size and importance to be entitled to four commercial and one educational television station.

According to the census figures, the Greater St. Louis area had a 1960 population of 2,060,103, the ninth largest city in the Nation.

It ranks ninth in the number of manufacturing establishments, ninth in the number of employees engaged in manufacturing, and eighth in total salaries paid to such employees.

In wholesale trade, the area ranks eighth in number of establishments and seventh in total sales, number of employees, and total payroll.

In retail trade it ranks ninth in number of establishments, total sales, number of employees, and payroll.

In the service trades, it ranks 9th in number of establishments and number of employees and 10th in the amount of sales.

The area also ranks eighth in size of bank deposits and in the number of $1 million or larger firms with St. Louis headquarters.

The allocation to St. Louis of four commercial channels would be in line with the allocation made to other cities of comparable or even small size. I understand that the following allocations have been made: Dallas-Fort Worth has four commercial and one noncommercial (*) educational VHF channels (4, 5, 8, 11, and *13) as have Denver (2, 4, *6, 7, and 9), Miami (*2, 4, 6, 7, and 10), San Francisco (2, 4, 5, 7, and *9), Minneapolis-St. Paul (*2, 4, 5, 9, and 11), Portland (2, 6, 8, *10, and 12), and Washington, D.C. (4, 5, 7, and 9), Indianapolis-Bloomington (6, 8, 13, and 4) each have four commercial VHF channels, and communities much smaller than St. Louis have been allocated three channels, Atlanta, Ga. (2, 5, and 11), Milwaukee (4, 6, *10, and 12), Little Rock, Ark. (*2, 4, 7, and 11), Eureka, Calif. (3, 6, and 13), Tampa-St. Petersburg (*3, 8, 10, and 13), Davenport-Rock Island-Moline, Ill. (4, 6, and 8), New Orleans, La. (4, 6, *8, and 12), Baltimore, Md. (2, 11, and 13), Detroit, Mich. (2, 4, and 7), Kansas City, Mo.-Kans. (4, 5, and 9), Omaha, Nebr. (3, 6, and 7), Las Vegas, Nev. (8, 10, and 13), Reno, Nev. (2, *5, 4, and 8), Albuquerque. N. Mex. (4, *5, 7, and 13), Rochester (proposed) (8, 10, and 13), Syracuse (proposed) (3, 5, and 9), Cincinnati, Ohio (5, 9, and 12), Cleveland, Ohio (4, 6, and 10), Tulsa, Okla. (2, 6, *8, and 11), Charleston, S.C. (2, 4, and 5), Chattanooga,

Tenn. (3, 9, and 12), Memphis, Tenn. (*2, 4, 5, and 8), Amarillo, Tex. (*2, 4, 7, and 10), Beaumont-Port Arthur, Tex. (4, 6, and 12), San Antonio, Tex. (4, 5, *9, and 12), Corpus Christi, Tex. (3, 6, and 10), El Paso, Tex. (4, *7, 9, and 13), Houston, Tex. (2, *8, 11, and 13), Salt Lake City, Utah (2, 4, 5, and *7), Norfolk, Va., area (3, 10, and 13), Seattle, Wash. (4, 5, 7, and *9), and Spokane, Wash. (2, 4, 6, and *7). In addition, three channels have been proposed for Johnstown-Altoona, Pa. (6, 8, and 10), Baton Rouge, La. (2, 9, and 11), Dayton, Ohio (2, 7, and 11), and Knoxville, Tenn. (6, 8, and 10), and Charlotte, N.C. (3, 6, and 9).

2. The question of whether channel 2 should be in Springfield or in St. Louis has been pending before the Commission and the courts since July 31, 1956, and is no recent or sudden proposal such as was made on August 15, 1961, in the eight *Deintermixture* cases.

A major complaint against the August 15, 1961, deintermixture proposal for the eight markets is that it came so unexpectedly after the eight stations involved had been in actual operation for many years, and after the Commission had in many cases previously refused proposals for taking the VHF channel out of the community.

On the other hand, the proposal to put channel 2 in St. Louis rather than Springfield was specifically made by the Commission on June 26, 1956, in docket 11747. In that proceeding, an order was issued on March 1, 1957, placing channel 2 in St. Louis and Terre Haute rather than in Springfield. This order was appealed on the ground that it violated section 307(b) of the act. In affirming the Commission's order, the court said on May 1, 1958, in *Sangamon Valley Television Corp.* v. *U.S.* 255 F. 2d 191:

> "Petitioner, applicant for channel 2 at Springfield, attacks the decision as illegal because inconsistent with section 307(b) of the Communications Act.
>
> "We are unable to sustain the attack. Upon the basis of a full hearing the Commission weighed the various factors involved and reached a reasoned decision within its competence. We find nothing arbitrary, capricious, or otherwise illegal in the decision, and it accordingly is affirmed."

Pursuant to said decision, a television service on channel 2 in St. Louis was initiated on April 15, 1957, and has been serving the people of St. Louis and the adjacent Illinois area ever since.

It is true that thereafter, the court of appeals reversed the March 1, 1957, decision but only on procedural grounds. In *Sangamon Valley Television Corp.* v. *U.S.*, 269 F. 2d 221, decided on May 8, 1959, the court of appeals sent the case back to the Commission to determine if the case should be reconsidered because of ex parte presentations during the rulemaking proceeding and whether any party was disqualified. The Commission decided that the case should be reconsidered but that no party was disqualified. On July 27, 1961, in *Sangamon Valley Television Corp.* v. *U.S.*, 294 F. 2d 742, the court of appeals agreed that the ex parte representations did not disqualify any party in view of the fact that ex parte contacts in rulemaking proceedings were "somewhat common practices," and directed that the Commission conduct an entirely new proceeding. This was begun on September 7, 1961, when the Commission issued a new notice in docket No. 14267. In directing the Commission to conduct a new proceeding, the court of appeals authorized the Commission to maintain the service in St. Louis.

This docket is now pending before the Commission pursuant to the court of appeals order. All parties have filed comments and reply comments. The issue raised by the Commission is the same as the one raised in the rulemaking proceeding begun on July 26, 1956, namely whether channel 2 be in Springfield or in St. Louis and Terre Haute.

From this chronology, I hope I have made it plain that even though the proceeding now before the Commission was started only by notice issued on September 7, 1961, it raises the same question as the proceeding started on July 27, 1956, and in effect it is a continuation of that proceeding.

There is, therefore, no element of surprise in the Springfield-St. Louis problem such as is involved in the eight *Deintermixture* cases started on August 15, 1961.

3. Since there is no existing VHF station in operation in Springfield, and there never was one in operation there, the rulemaking proceeding for Springfield is quite different from the rulemaking proceedings for the eight markets involved in the August 15, 1961, orders where existing VHF stations were threatened with loss of their channels. The Springfield-St. Louis-Terre Haute situation is not in the same category as the eight so-called *Deintermixture* cases.

Several identical bills have been introduced, the purpose of which is to prevent the FCC from now deintermixing a community by deleting a VHF channel on which an operating station is presently giving service to the community. Such bills have been introduced by Mr. Roberts of Alabama (H.R. 9267) in which the Commission proposes to delete an existing station in Montgomery, Ala., by the late Mr. John J. Riley (H.R. 9322) of the Second Congressional District of South Carolina and Mr. Robert W. Hemphill (H.R. 9293) of the Fifth District of South Carolina, in which State it is proposed to delete the VHF station operating in Columbia, S.C.; and by Mr. Anderson of Illinois (H.R. 9291) as to which State proceedings are pending to delete the presently operating stations at Champaign, Ill., and Rockford, Ill., and some similar bills by others with respect to similar proposed Commission action. The occasion for these bills was the surprise institution by the FCC on August 15, 1961, of the proposal I already have referred to to take existing VHF stations out of eight markets, namely Madison, Rockford, Hartford, Erie, Binghamton, Champaign, Columbia, and Montgomery (docket Nos. 14239 to 14246).

I repeat and I emphasize that in each of these eight cases there is a VHF station which is and for a number of years has been actually operating and there is a threatened loss of actual service by the deletion of these stations. In the Springfield-St. Louis case, there has never been any VHF operation in Springfield. All operations on channel 2 have been in St. Louis and it is St. Louis that is threatended with deprival of an existing service.

I am confident that the authors of H.R. 6267 and similar bills were concerned with only the problem of VHF stations which are in actual operation and not with VHF allocations which have not been put to use. But the language of the bills, if literally read might be construed to go beyond the situation of deleting a presently operating station, and to perhaps prohibit the Commission from deleting an assignment made on or prior to September 1, 1961, even though there was then no station either operating or authorized to operate on the channel. (This is clearly beyond the problem with which these Congressmen were concerned.) The real objective of these Congressmen would be made clear by inserting on line 2 of page 2 of each such bill after the date "September 1, 1961," the words "and on which a television station was then operating."

This clarification is desirable to make clear that the legislation would not apply to situations such as in Springfield, Ill., as to which a deintermixture proceeding is pending with respect to channel 2, but on which there is no VHF station now operating. For, in the eight markets involved in the August 15, 1961, orders, an existing station is threatened with loss of its channel and the public is threatened with loss of an existing service. This presents private and public equities that may well justify conferring "grandfather" rights to the committee in which these stations are operating. On the other hand, in Springfield there is no existing station on channel 2. To the contrary there is a station in St. Louis giving excellent interim service to the St. Louis public who have rights that should not be lightly trampled upon. For, as I have pointed out under point 1, St. Louis is entitled to and should have four commercial stations if this can be done consistent with section 307(b) of the act, and that question I submit should not be decided by the Congress but rather by the Commission in accordance with the directions of the court of appeals.

4. The complicated allocation questions presented in the Springfield-St. Louis-Terre Haute proceeding should be decided on its merits by the Commission subject to review of the court of appeals and Supreme Court.

Very extensive arguments and data have been submitted to the Commission in the Springfield-St. Louis-Terre Haute proceeding in the form of comments and reply comments, on the merits of channel 2 being in St. Louis and Terre Haute rather than in Springfield.

It seems to me that the proper way to decide that issue is to allow the Commission to make that decision rather than to have this committee attempt to mediate between the conflecting claims of three different cities in three different States. The Congress should lay down general principles and not attempt to decide individual cases.

Nor would it make any difference that legislation were passed requiring all sets in the future to have UHF as well as VHF receivers. For, such legislation is concededly only an attempt toward a long-term increase in the audience available for UHF stations. Its theory is that as present sets became obsolete the new ones that take its place would provide built-in UHF receivers. But as I understand it the estimate is that it could take at least 6 years for an area to

become sufficiently saturated with new sets to provide an audience for a UHF station. At the present time, according to figures submitted to the Commission, 82 percent of all television sets in the Springfield area have UHF receivers. If the all-channel legislation is passed, it will not be too long before the remaining 18 percent will also have sets equipped to receive the UHF signals. Springfield has a UHF station in operation and there are a number of others in the area. St. Louis on the other hand has no UHF stations and so far as I know virtually no UHF receivers so could not get any benefits from the legislation for at least 6 years. In the interval, St. Louis would be deprived of an existing service.

I urge, therefore, that the proper course is to let the Commission decide the pending case now before it, and that there is neither justification nor need to inject legislation into the picture as there may well be for the eight markets. For legislation as to these markets would merely preserve the status quo of VHF stations already on the air; that is not appropriate for Springfield, in which there is no present VHF operation, but merely an allocation, never used, which is presently the subject of a rulemaking proceeding, to decide if it will better serve the whole public interest by being used in Springfield or in St. Louis and Terre Haute. I am concerned with solely the question of public interest and I firmly believe that the public interest will be promoted by the Congress not interfering in the Springfield-St. Louis situation. Let the matter be decided by the Commission as directed by the court of appeals.

STATEMENT OF HON. BOB WILSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. Chairman and members of the committee, my name is Bob Wilson. I represent the 30th District of California in the House of Representatives.

I strongly support legislation such as H.R. 9267 and other similar bills before the committee. These bills would give the FCC power to overcome a serious obstacle to further development of our American television system, and would at the same time spell out very clearly the fact that FCC is not to use this power to the injury of the fine system of television which we in this country already enjoy.

By the same token, I oppose H.R. 8031, the legislation which the FCC has requested. This bill would place in the FCC's hands a sweeping power which could be used to the detriment of our television service rather than to promote its growth.

It is almost universally recognized that the greatest single obstacle to the extension of our television system by utilizing the UHF channels side by side with the VHF channels is the fact that relatively few home receivers are equipped to receive UHF channels. Potential broadcasters are deterred from putting new UHF stations on the air because only a portion of the public will be able to receive them. The most effective solution to this problem is legislation empowering the FCC to require that all television sets be able to receive both VHF and UHF. However, this power could also be used to make it easier for the FCC to shift VHF stations to UHF channels, rather than to encourage the growth and development of all our television channels, VHF and UHF, side by side.

As the committee knows, the FCC has already begun proceedings designed to make eight cities all-UHF. I understand that implementation of these proposals would deprive many hundreds of thousands of people of television service—in some cases, of all television service, because the range of UHF stations is considerably shorter than the range of VHF stations.

While these proposals do not directly affect my district, the FCC has stated that it intends to propose action of this sort in other cities in the future, and perhaps in whole areas of the country. I do not know whether my district is next on the list or not. I do know that such action is unwise and contrary to the public interest, wherever it may take place.

I therefore warmly support such bills as H.R. 9267, which would give the FCC power to solve the problem of putting in the public's hands television sets able to receive all 82 VHF and UHF channels, and would at the same time preclude the use of this power to effect damaging policies such as shifting areas of the whole country to all-UHF.

Thank you.

STATEMENT OF HON. ROBERT N. GIAIMO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CONNECTICUT

Mr. Chairman, I wish to thank you and my colleagues on this committee for the opportunity to appear before you today in behalf of H.R. 9267 and similar legislation.

These bills would authorize the Federal Communications Commission to prescribe the minimum performance standards for television receivers shipped in interstate commerce and would also prohibit the change of an existing VHF allocation to a UHF assignment for the purpose of "deintermixture."

The problem involved is of great concern to us and many thousands of citizens of Connecticut, because the alternative to such all-channel receivers is the implementation of the process of "deintermixture." This would threaten us with the loss of one of our most important media of communication, Hartford's channel 3.

"Deintermixture" is a policy which, as I am sure I need not remind you, has been evolved as a means to encourage the growth of ultrahigh frequency stations. This principle enables the FCC to delete VHF assignments in certain localities in order to permit the broadcasting of UHF signals.

I am opposed to "deintermixture" because I feel it is unfair, unwarranted, and unwise aribtrarily to deprive tens of thousands of people of television coverage. Like my colleagues on both sides of the Hill, I have received many, many letters asking why the FCC wants to take away their existing television service.

This is not a matter of two equal organizations which wish to operate on the same wavelength. UHF and VHF have only one similarity—their classification as communications media. They are greatly dissimilar in their ability to provide satisfactory television coverage. There are many areas which cannot receive UHF, but there is no reason to assume that the existence of VHF frequencies would preclude the operation of UHF. While I agree that it is in the public interest to encourage the development of UHF stations, I do not feel that it should be done at the expense of existing and necessary institutions.

This legislation would permit the exercising of a basic American principle—free competition. By assuring that all television sets are equipped to receive both UHF and VHF signals, we will neither unduly penalize nor unfairly favor either media.

Television has become an important institution. We turn to it for education, news, and for entertainment. As such, it deserves considered, thoughtful treatment both by the audience and the industry.

We grant an opportunity for equal competition to other media of communication. There is no regulation prohibiting the existence of different types of newspapers, magazines, or radio stations. However, in the field of radio and television broadcasting, we are bound by the limitations inherent in different frequencies. UHF and VHF conflict on this score, but to prohibit the use of one and allow only the use of the other is illogical.

One of the most important functions of a free society is the guarantee it gives its people of continued access to information. If the process of "deintermixture" becomes fixed policy, many thousands of people will be deprived of a useful—indeed, vital—source of information.

There has been much comment of late on the content of television programing. By permitting UHF and VHF to operate side by side, the enactment of all-channel receiver legislation would substantially assist the growth of UHF television stations, and would offer the potential for a vast range of choice for the individual viewer. The challenges of competition could not but improve on any existing flaws in the industry, but the alternative, as suggested by "deintermixture," could not but be a serious and irreparable loss to the public.

Channel 3 is typical of the many VHF stations, now threatened by "deintermixture," which have been of great importance to the people in their coverage area. To deprive any segment of the American public of such service is to deprive them of the opportunity to acquire equal knowledge. The unlimited potential suggested by this legislation would unquestionably promote the public interest in the State of Connecticut.

I do not feel that the Congress should ignore its responsibility to the American people in this field. Therefore, Mr. Chairman, I wish to state my support of H.R. 9267 and earnestly request your committee to take favorable action on this measure.

Again, sir, may I thank you for the opportunity you have given me to express my views and those of my constituents.

The CHAIRMAN. This will conclude the hearings today. The committee will recess until 10 o'clock in the morning at which time the Federal Communications Commission will be here.

(Whereupon, at 4 p.m., the hearing was recessed, to reconvene at 10 a.m., Tuesday, March 6, 1962.)

ALL-CHANNEL TELEVISION RECEIVERS AND DEINTERMIXTURE

TUESDAY, MARCH 6, 1962

HOUSE OF REPRESENTATIVES,
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.

The committee met, pursuant to recess, at 10 a.m., in room 1334, New House Office Building, Hon. Oren Harris (chairman of the committee) presiding.

The CHAIRMAN. The committee will come to order.

This morning as we resume hearings on H.R. 8031 and related bills on the subject of all-channel receiving sets and deintermixture, we have present Mr. Minow, the Chairman of the Federal Communications Commission; Mr. Ford, Mr. Hyde, and Mr. Cross, and such of your staff as you wish to call up.

STATEMENT OF HON. NEWTON N. MINOW, CHAIRMAN OF THE FEDERAL COMMUNICATIONS COMMISSION; ACCOMPANIED BY COMMISSIONERS HYDE, FORD, AND CROSS; KENNETH A. COX, CHIEF, BROADCAST BUREAU; MAX D. PAGLIN, GENERAL COUNSEL; AND TEDSON J. MYERS

Mr. MINOW. The Chief of the Broadcast Bureau, Mr. Cox, is here; our General Counsel and others whom we may have to call upon are Mr. Greenberg, Mr. Golden, and Mr. Cahill.

The CHAIRMAN. I have a letter from Mr. Lee with a statement which he asked to be put in the record, and at the appropriate time we will put it in. It is rather interesting. He says, "Mr. Cahill said it would be appropriate if I send you a statement for inclusion in the record. While none of the Commissioners agree with it, I would like to see it put in the record."

So at the appropriate time we will put it in the record and make a copy available if copies are available.

Mr. Springer?

Mr. SPRINGER. Mr. Chairman, yesterday I didn't have this in hand, and I ask unanimous consent that it be inserted in the record at this point. This is Joint Resolution No. 4 of the State of Illinois, the 72d general assembly, the joint resolution of both the house and the assembly, which was passed unanimously in both bodies and certified to by the president of the senate and the secretary of the senate, the speaker of the house of representatives, and the clerk of the house of representatives, which says—

We respectfully request and recommend that the Senate and the House of Representatives of the United States give favorable consideration to the passage

of the bills prohibiting the deletion of VHF television channels from Illinois as proposed by the Federal Communications Commission.

Mr. Chairman, I ask that the entire certificate of the secretary of state of Illinois and the resolution be placed in the record at this point.

The CHAIRMAN. If the gentleman would permit, I would suggest that it be included in the record of yesterday following your statement, so it would appear there, and then the record we will have here today we will start with the Commission.

Mr. SPRINGER. With that modification, may I ask again that it be included in the record at that point?

(The document referred to will be found in the record of March 5, 1962.)

The CHAIRMAN. Mr. Minow, we are glad to extend a welcome to you and the other members of the Commission, and to your staff. I know you realize full well the importance of the problem and some of the difficult situations facing this committee, as well as the Commission, and the Congress. So we shall be glad to hear you at this time.

Mr. MINOW. Mr. Chairman, and members of the committee, we are very pleased to be here today to present the Commission's views on a number of bills which concern television receiving equipment and the assignment of channels for television broadcast stations.

We appreciate the interest of Members of Congress and others in the question of deintermixture. Deintermixture is a most important matter, and we will address ourselves to it later in this statement. But, at the start, we believe it would be helpful to discuss H.R. 8031, the proposal to authorize the Commission to regulate the performance characteristics of television receivers.

The purpose of this bill is to require that all television receivers shipped in interstate commerce or imported into the United States be equipped at the time of manufacture to receive all television channels; that is, the 70 channels in the UHF portion of the spectrum, as well as the 12 in the VHF portion.

This proposal is the most important part of the Commission's legislative program. It has had our unanimous support since early 1960. We firmly believe that its enactment, with one modification which I will discuss later in this statement, is vital to the national interest. It is a carefully thought out proposal which we have discussed with all segments of the industry and educators, and I happy to say that it has won significant support from a considerable portion of the industry and educators.

We would like to explain the reasons which have led the Commission to conclude that this legislation is essential.

Just what is at stake?

We think it is nothing less than whether the American people are going to have the chance to enjoy and reap the benefits of television service to the fullest degree.

This is the goal we seek to achieve.

Congress has charged this Commission in the Communications Act to "encourage the larger and more effective use of radio in the public interest." With this in mind, the Commission has come to the basic conviction that the public interest requires a television system which will serve all the people, encourage local outlets, foster competition—particularly in the larger markets—and meet educational needs.

Specifically, this means a television system which will: (1) Be truly competitive on a national scale by making provision for at least four commercial stations in all large centers of populations; (2) provide at least three competitive facilities in all middle-sized communities; (3) permit all communities of appreciable size to have at least one television station as an outlet for local self-expression; and (4) provide noncommercial educational service throughout the country.

And, as the members of this committee well know—we just don't have that now, and we are nowhere near it.

We can compare what we do have, with the ultimate potential of television broadcasting—with the help of the illuminated map before you. The map follows the plan of allocation worked out for cities all over the United States. This plan is the document attached to copies of this statement. Actually, it is all of section 3.606 of the Commission's rules and regulations, and is called the table of assignments. Most of your own hometowns are listed there, all decked out with numbers. They are also represented on the map. These are the channels assigned to them years ago. Most of them are not in use, of course, as we shall shortly see. Indeed, it may surprise some Washingtonians that channels 14, 20, and 50 are waiting to be used here along with 4, 5, 7, 9, and 26.

Each tiny light on the map represents one of the television channels assigned to serve the locality or area where the light is placed.

First, we are going to show the 500 VHF stations on the air, commercial, and educational. The bright red lights are the 458 commercial stations; the green lights are the 42 educational stations.

Now we are going to show the 181 V's not in use currently. The pink lights which predominate are the nonreserved assignments and the blue lights are the educational assignments. With respect to the nonreserved assignments 60 have been applied for and are in some stage of processing. They will be on the air within the next few months or years.

The CHAIRMAN. I dislike to interrupt, but what do you mean, for the benefit of the committee, by a nonreserved assignment?

Mr. MINOW. Nonreserved is commercial, if it is reserved that means it is reserved for educational use. Nonreserved is equivalent to saying it is open for commercial use.

The CHAIRMAN. I still don't get it. The pink lights which predominate are the noncommercial assignments?

Mr. MINOW. Those are the commercial V's which are not on the air.

The CHAIRMAN. You mean we have got commercial V's of that number that have never gone on the air?

Mr. MINOW. That is right.

If you will look at them, Mr. Chairman, you will see that most of them are in areas of low populations, a lot of them are in the Far West, and of the 181, 60 are now before us or before the courts in some stage of processing.

The CHAIRMAN. Very well.

Mr. MINOW. The remaining 70 nonreserved assignemnts which have not been applied for are in sparsely populated areas; there are virtually none available in the heavily populated areas.

The situation in UHF is in sharp contrast. We are going to show 103 UHF stations presently on the air. This includes 85 commercial

stations in bright yellow lights and 18 educational stations in green lights.

Compare this with the 1,441 UHF assignments which are not in use. The white lights are the unusual UHF nonreserved assignments and the blue lights the unused UHF educational assignments. Altogether, only 7 percent of the potential UHF assignments are in use.

Finally, educational television. Some of these are in VHF, most are assigned to UHF channels; 60 educational stations are now on the air; they are the green lights. And here is a picture of the midwest airborne television project. And 214 educational assignments—the blue lights—are not on the air.

If we put them all together—here are all of the commercial plus the educational stations, 603, providing television broadcast service to the American people. And here is the ultimate or 2,225 stations under our present table of assignments which you have before you.

The CHAIRMAN. What is the big light flashing in the center?

Mr. MINOW. That it the airborne projects, the big school project in the Middle West which is being broadcast from an airplane by Purdue University.

So we are nowhere near out potential service.

In industry terms, the consequences of our present situation amount to this: The country is divided into 278 television markets; 127—or almost half of these markets—have only 1 television station; 70—or about one-fourth—are 2-station markets; 57 are 3-station markets; and 24 are markets with 4 or more stations. Therefore, under the industry marketing terms, almost three-fourths of the television markets do not have a choice of three local stations. It is true that many of these are smaller markets, and that most people have a choice of at least three television signals. But the significance of the market figures is this: Our present system is limited by the allocation structure to no more than three national networks—no matter how many entrepreneurs may be willing to enter the commercial field or how much demand or need there may be for additional network service.

We have squeezed the 12-channel VHF system to the limit to try to make enough room for at least 3 commercial networks. Even this has not been fully achieved. Now we are considering squeezing a third VHF commercial station in eight important cities at less than our standard mileage separations. These cities include Oklahoma City, Johnstown, Baton Rouge, Dayton, Jacksonville, Birmingham, Knoxville, and Charlotte. But, despite this, even if these eight assignments were ultimately added to the table, there would still be sizable communities like Toledo, Ohio; Augusta, Ga.; Jackson, Miss.; Wheeling, W. Va.-Steubenville, Ohio; Austin, Tex.; Terre Haute, Ind.; and Quincy, Ill.-Hannibal, Mo., where viewers will not receive the full range of programs offered by the three networks. One- or two-station markets simply cannot receive the schedules of three networks.

Therefore, even if the Commission ultimately added the proposed channels in some or all of the cases now under consideration, it is perfectly clear that short spaced assignments do not hold the answer to the allocations problem. Any attempt to squeeze in a substantial number of VHF stations at short spacings would only result in seriously degrading the quality and extent of television service to metro-

politan areas and virtually eliminating such service to many rural areas. Moreover, lowering the minimum spacing could not, in any event, provide us with the number of additional assignments necessary to achieve our allocation goals, particularly in the densely populated areas of the country.

Let me add, however, that, if we are unable to find a means of effectively using the UHF channels, we can certainly expect mounting demands and pressures to break down the existing standards and to squeeze in more VHF assignments.

As for more VHF—we have been completely unsuccessful, as you know, in our efforts to secure more VHF spectrum from the Government. We would like to offer for the record the letter which the Commission received from the OCDM, dated August 15, 1960. This letter finally closed the door on any realistic possibility of allocating additional VHF channels from spectrum space held by the Government.

What, then, is the reason why UHF has not been able to develop successfully?

This committee well knows that the answer to that question is not simple. One of the most significant reasons has been the scarcity of television receivers which are capable of receiving stations operating on UHF channels. There are approximately 55 million television receivers in the hands of the public. However, only about 9 million of these, or about 16 percent, are capable of receiving UHF television signals. Moreover, the overwhelming bulk of television set production is limited to VHF only sets. Thus, in 1953 over 20 percent of the television receivers were equipped at the time of manufacture to receive UHF; while in 1961, only about 6 percent of the receivers produced were so equipped.

This scarcity of UHF receivers clearly places UHF stations at a crippling disadvantage with competing VHF stations. As a consequence, advertisers naturally prefer VHF outlets with assured audiences. For the same reason, the networks prefer to affiliate with VHF where they are available.

This scarcity of UHF receivers, therefore, has been, in large part, responsible not only for the fact that relatively few UHF stations have dared to go on the air, but also for the fact that 100 licensees who did take a chance in UHF have had to give up and "go dark" at great losses of money, sweat, and energy. We emphasize that we do not cite these facts in order to place blame on the television set manufacturers. But we must face the fact that the considerations which impel manufacturers to produce 12-channel-VHF-only sets are fundamentally inconsistent with our allocation of, and national need for, 82 television channels.

At this point let me say a word about our experimental station in New York City. The primary purpose of that experiment is to determine whether UHF television will serve satisfactorily in a so-called "canyon" city such as New York. We also hope to obtain valuable information which will help to improve both UHF television receivers and UHF transmitting equipment, as well as information as to how to improve UHF coverage. Commissioner Lee has supervised the experiment, and I believe he will be here tomorrow, Mr. Chairman, to answer any questions you may have about it.

We emphasize, however, that we have already had considerable practical experience with UHF in a number of cities. Fort Wayne, South Bend, and Elkhart, Ind.; Peoria, Ill.; Wilkes-Barre and Scranton, Pa.; Lima, Zanesville, and Youngstown, Ohio; Fresno, Calif.; Springfield-Holyoke, Mass.; Yakima, Wash.; Lexington, Ky.; and Elmira, N.Y., are all cities which have successfully been using only UHF channels.

We are convinced that getting UHF sets in the hands of the public will provide the basic prerequisite for opening up this service. The only way this can be done on a nationwide scale is by passage of H.R. 8031. If this proposal is enacted, there will be available, within 4 to 6 years, a large enough percentage of all-channel sets in use to mark a beginning of the end of the television allocations problem, and an end to the limited beginnings we have experienced in television service.

While we cannot say that all the television assignments will be applied for, we do know that television within a short time has experienced a phenomenal growth. In 1949, television advertising expenditures were about $58 million; in 1960, they were over $1,600 million. Americans now own 55 million television sets. More homes have television sets than indoor plumbing. Television reaches an audience of over 165 million people. From the time they awakened this morning until bedtime tonight, children under 12 will spend 70 million hours in front of sets, and on this day, the average family will consume almost 5½ hours of its time watching television. Meanwhile, our population expands; new families are formed; per capita income trends upward; leisure time becomes increasingly available and new products and new companies seek advertising outlets. All of these economic and social measures indicate firm support for an expanded system of commercial television.

We are well aware, of course, that objections have been voiced to our legislative proposal. We should like to address ourselves briefly to some of these.

First, the question of constitutionality. We firmly believe the legislation would be constitutional. When this question arose in 1960, the General Counsel of the Commission prepared a legal opinion upholding the constitutionality of the proposal. Copies of this opinion have been made available to you and we would like to offer it for the record.

The CHAIRMAN. We will include it in the record at this point.

(The document referred to is as follows:)

OPINION OF THE GENERAL COUNSEL OF THE FEDERAL COMMUNICATIONS COMMISSION

Reconstitutional power of the Congress to enact legislation authorizing the FCC to prescribe minimum performance capability of television receivers which are traded or shipped in interstate commerce for sale or resale to the public.

PRELIMINARY STATEMENT

Hearings were held on television allocations by the Communications Subcommittee, Senate Interstate and Foreign Commerce Committee February 2, 4, and 5, 1960 ("Television Inquiry," 86th Cong., pt. 8). At page 4640 of those hearings the Chairman of the FCC offered for the record a draft of suggested legislation empowering the Commission to establish standards for television receivers. The text of that amendment is given at pages 4648–4649.

Senator Pastore has introduced at the request of the FCC this legislation, S. 3115, 86th Congress. The text of that bill is as follows:

"A BILL To amend the Communications Act of 1934 in order to give the Federal Communications Commission certain regulatory authority over television receiving apparatus

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 303 of the Communications Act of 1934 (47 U.S.C. 303) is amended by inserting at the end thereof the following:

"'(s) Have authority, whenever the objectives of this Act so require, to prescribe minimum performance capabilities for apparatus designed to receive television pictures broadcast simultaneously with sound, when such apparatus is traded or shipped in interstate commerce for sale or resale to the public.'

SEC. 2. Part I of title III of the Communications Act of 1934 is amended by inserting at the end thereof a new section as follows:

"'SEC. 330. No person shall trade or ship in interstate commerce for sale or resale to the public apparatus described in subsection 303(s) unless it complies with minimum performance capabilities prescribed by the Commission pursuant to section 303(s): Provided, That this section shall not apply to carriers transporting such apparatus without trading in it.'"

Question

Senator John O. Pastore, chairman of the subcommittee, raised questions as to the constitutionality of such a proposal, and requested a copy of any written brief (pp. 4614–4616). This opinion is general and not directed to the details or precise language of any particular legislative proposal, but rather to the question of the validity of this legislation or of legislation of similar import under the constitutional power of the Congress to regulate or provide for the regulation of interstate commerce.

Conclusion

It is my view, for the reasons set forth herein, that legislation of this character would be held by the courts to be within the congressional power under the commerce clause of the Constitution. To be sure, argument could be made that such a statute regulates manufacturing and production rather than interstate commerce, and that it seeks to control an activity which is wholly intrastate in character. However, to the extent that the legislation is directed to interstate shipments of television receivers, the adequacy of the performance characteristics of which as described in the language of the bill above quoted, constitute an essential element in a nationwide radio communication service and to the regulation thereof, it would appear to come within the power of Congress. That power "extends to every part of interstate commerce, to every instrumentality or agency by which it is carried on * * * [and] * * * permits Congress to attack an evil directly at its source, provided that the evil bears a substantial relationship to interstate commerce". (*North American Co.* v. *Securities and Exchange Commission*, 327 U.S. 686, 705 1945).

Facts

The factual background underlying such legislation would seem to reflect its purpose to effectuate the public policy under the Communications Act of 1934, as amended, of making available to all the people of the United States a rapid, efficient, nationwide radio communication service. Under the act, the Federal Communications Commission is charged with the responsibility of generally encouraging the larger and more effective use of radio and television in the public interest. In carrying out its duties to provide for the use of channels of interstate radio and television transmission, within the physical limitations of the radio spectrum, as well as the limitations resulting from the use of such channels for military or other governmental purposes, the Commission has assigned channels available for television transmission among the several States and communities throughout the Nation.

Initially, the channels made available for television broadcasting included 1 to 13 in what is termed the very high frequencies (VHF). (Channel 1 was later deleted from the television broadcasting allocation and reallocated to the Land Mobile Service.) The 12 VHF channels presently available for television broadcasting have permitted approximately 679 assignments of these channels to various communities and of these some 558 are licensed, under construction or the subject of pending applications.

In 1952, the Commission sought to enlarge upon the channels available for commercial use by allocating to television broadcasting channels 14 to 83 in

what is termed the ultra high frequencies (UHF). Since that time, the Commission has made some 1,538 assignments of UHF channels to various communities, and this number could be further expanded if additional assignments were desired. Of these 1,538 assignments, only 204 are licensed or under construction or the subject of pending applications. Notwithstanding the availability of many more UHF channels than VHF for television broadcasting, it is estimated that of some 52 million television receiving sets throughout the country, only some 8,700,000 are capable of receiving television signals which are broadcast in the ultra high frequencies. In 1959, of some 6,350,000 television sets which were manufactured, approximately 7 percent or only 435,000 were capable of receiving UHF television signals.

Inherent in legislation of the character described above is the presupposition that were all television receiving sets equipped to receive both VHF and UHF television signals, the number of reception points necessary to establish a national ultra high frequency radio communication service could be substantially increased. Such an increase in reception capability would undoubtedly affect the potential use of UHF channels for television broadcasting which, in turn, would appear to be related to the larger and more effective use of television in the public interest and to be necessary to a rapid, efficient, and nationwide television communication service.

Discussion

The constitutional provision relating to interstate commerce is set forth in article I, section 8, clause 3, in the following language:

"The Congress shall have power * * * to regulate commerce with foreign nations and among the several States, and with the Indian tribes; * * *."

It would seem [to be beyond reasonable question] that legislation prohibiting the interstate shipment of articles which do not meet the requirements of public interest or public policy as found by the Congress is most directly a regulation of interstate commerce within the powers of the Congress under this constitutional provision. As the Supreme Court said in the *U.S.* v. *Darby* (312 U.S. 100) on page 113:

"While manufacture is not of itself interstate commerce, the shipment of manufactured goods interstate is such commerce and the prohibition of such shipment by Congress is indubitably a regulation of the commerce. The power to regulate commerce is the power to prescribe the rule by which commerce is governed." *Gibbons* v. *Ogden* (9 Wheat. 1, 196).

Comparatively recent legislation of this character enacted under this constitutional authority include a 1951 statute prohibiting the transportation in interstate commerce of any gambling device to a State which does not reject this Federal protective measure (15 U.S.C. 1171 et seq.); a 1953 act which prohibits the manufacture for sale or transportation in interstate commerce of highly flammable articles of wearing apparel (15 U.S.C. 1191 et seq.); a 1956 law which prohibits delivery in interstate commerce of any household refrigerator unless equipped with an adequate door-opening device approved by the Secretary of Commerce (15 U.S.C. 1211 et seq.); and a 1958 enactment which penalizes the manufacturer of automobiles distributed in interstate commerce who fails to affix and endorse a label thereon disclosing clearly and distinctly certain information concerning such automobiles (15 U.S.C. 1231 et seq.).

Comparable legislation prohibiting or regulating shipment in interstate commerce has been sustained as a valid exercise of the constitutional power, with respect to articles produced under substandard labor conditions (29 U.S.C. 201 et seq.) *U.S.* v. *Darby supra;* tobacco marketed without regard to established production quotas (7 U.S.C. 1281 et seq.) *Mulford* v. *Smith* (307 U.S. 38); securities which are not registered in compliance with legislative requirements (15 U.S.C. 79) *Electric Bond and Share Company* v. *Securities and Exchange Commission* (303 U.S. 419). Similarly the power of Congress to prohibit transportation in interstate commerce has been held to include noxious articles (*Hipolite Egg Co.* v. *United States*, 220 U.S. 45); stolen articles (*Brooks* v. *United States*, 267 U.S. 432); kidnaped persons (*Gooch* v. *United States*, 297 U.S. 124); convict-made goods, traffic in which is contrary to the State of destination (*Kentucky Whip & Collar Co.* v. *Illinois Central R. Co.*, 299 U.S. 334).

It has been sometimes said that the Congress is free to exclude from interstate commerce articles whose use has been determined to be injurious to the public health, welfare, or morals, but it seems clear that in context these terms encompass injury or hindrance to the effectation of any public policy adopted by the Congress. One definition of the scope of this power was set forth by the Supreme

Court in *North American Company* v. *Securities and Exchange Commission* (327 U.S. 686), a case concerning a statute which authorized the geographic and economic integration of public utility holding company systems as follows at page 705:

"Congress has a plenary power, a power which extends to every part of interstate commerce, to every instrumentality or agency by which it is carried on * * *. This broad commerce clause does not operate to render the Nation powerless, to defend itself against economic forces that Congress decrees inimical or destructive of the national economy * * *. Commerce itself is an intensely practical matter. To deal with it effectively Congress must be able to act in terms of economic and financial realities. The commerce clause gives it authority so to act."

It would appear that the legislation which this memorandum concerns, while in the form of a regulation of commerce, in substance affects or controls one aspect of the manufacture of television receivers. Nonetheless, such regulation is not open to successful attack, if it is related to interstate commerce. It is true that in years past some cases have held to the contrary. In *Hammer* v. *Dagenhart* (247 U.S. 251), the Supreme Court struck down a statute which excluded the products of child labor from interstate commerce. However, the principles underlining that decision were expressly overruled by the Supreme Court in 1940 in *U.S.* v. *Darby, supra*, page 116 with the statement that "the thesis of [that] opinion that the motive of the prohibition or its effect to control in some measure the use or production within the States of the article thus excluded from the commerce can operate to deprive the regulation of its constitutional authority has long since ceased to have force."

And, as the Court said in the same case, at page 115:

"Whatever their motive and purpose, regulations of commerce which do not infringe some constitutional prohibition are within the plenary power conferred on Congress by the commerce clause."

The Court in *Egan* v. *U.S.* (137 F. 2d 369) upheld as constitutional Federal legislative controls over political contributions. In upholding the statute in question, the Court described the scope of the constitutional provision in the following terms:

"The Commerce power extends to every activity, intrastate or interstate, which so effects interstate commerce, or the exercise of power over it, as to make regulation of such activity an appropriate means to the attainment of a legitimate end.

"The only question in such a case is whether the means adopted are appropriate to the attainment of the end. Congress having decided upon a legitimate end to be attained and a policy adopted to its attainment may choose the means for its accomplishment." (Citing, *Wickard* v. *Filburn, infra*, and *U.S.* v. *Darby, supra*.)

In a leading case establishing that radio communication constitutes interstate commerce, *United States* v. *The American Bond and Mortgage Company* (31 F. 2d, 448, 454), the district court recognized that both transmission and reception were essential to this commerce:

"It does not seem open to question that radio transmission and recept'on among the States are interstate commerce. * * * A device in one State produces energy which reaches every part, however small, of the space affected by its power. Other devices in that space respond to the energy thus transmitted. The joint action of the transmitter owned by one person and the receiver owned by another is essential to the result."

Because of the character of the radio receivers as instrumentalities of interstate commerce, it has been held that a State could not levy taxes thereon, the court stating that "receiving sets are absolutely essential instruments of interstate commerce" (*Station WBT Inc.* v. *Poulnot*, 46 F. 2d, 671, 675). In reaching a similar result with respect to a State tax on gross receipts from radio broadcasting, the Supreme Court described as the essential elements in the broadcasting operation, "A supply of electrical energy, a transmitter, the connecting medium or 'ether' between the transmitter and the receiving instruments, and the receiving mechanism" (*Fisher's Blend Station Inc.* v. *State Tax Commission* 297 U.S. 650). That TV broadcasting and reception is indistinguishable in this regard from radio broadcasting was established in *Dumont Laboratories* v. *Carroll* (184 F. 2d 153). See also parts II and III of title III of the act which include provision for the establishment of performance standards for radio receiving apparatus on ships navigated in the open sea or in any water

within the jurisdiction of the United States. The congressional power under the commerce clause is not confined simply to the regulation of commerce among the states but extends to those activities intrastate which so affect interstate commerce as to make regulation of them proper means to the attainment of a legitimate end. The Supreme Court has held on many occasions that the congressional power to regulate interstate commerce extends to the regulation of activities which have a substantial effect on such commerce, *Chicago Board of Trade* v. *Olsen* (262 U.S. 1) ; *Houston E. and W. Texas Railway Co.* v. *U.S.* (234 U.S. 342), *Southern Railway Co.* v. *U.S.* (222 U.S. 20). In many instances, this power has extended to the regulation of intrastate activities which are so related to interstate commerce that effective regulation of the later requires appropriate control over the former. *Currin* v. *Wallace* (306 U.S. 1) ; *U.S.* v. *Wrightwood Dairy Co.* (315 U.S. 110). Here again previous judicial decisions which point in another direction have long since been limited to the facts of a particular case or held not pertinent to more recent legislation under the commerce clause. Thus *Carter* v. *Carter Coal Company* (298 U.S. 238) which concerned the Bituminous Coal Act of 1935 affecting intrastate activities in the coal industry was expressly limited by the Supreme Court to the particular statute and its principles overruled by subsequent cases (*U.S.* v. *Darby, supra; Currin* v. *Wallace, supra; Mulford* v. *Smith, supra*). Cases like that of *Kidd* v. *Pearson* (128 U.S. 1), which held that manufacturing is not commerce so as to place it beyond State regulation, are not dispositive of the instant question since it has been held that such an exercise of State power did not bar a subsequent exercise of the commerce power by the Congress (*U.S.* v. *Darby, supra*). The Supreme Court stated in *Wickard* v. *Filburn* (317 U.S. 111), that the fact that the subject of the regulation may be production or manufacturing is not material for purposes of deciding the constitutional question.

"The reach of the power extends to those intrastate activities which in a substantial way interferes with or obstructs the exercise of the guaranteed power."

In the light of legal precedent, including the established interstate character of television broadcasting, it is my opinion that legislation in substance similar to that proposed by the Commission having to do with shipment of all channel TV receivers in interstate commerce would, if enacted, be upheld as valid against constitutional attack. This opinion is based upon the reasonable and compulsive relationship of the legislative proposal to "the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to all the people of the United States a rapid, efficient, nationwide, and worldwide wire and radio communication service. * * *"[1]

JOHN L. FITZGERALD,
General Counsel, Federal Communications Commission.

Mr. MINOW. Thank you. In addition to the purely constitutional point, there has been concern that this legislation would establish a "dangerous precedent" by substituting Government regulation for the public's freedom to choose among manufactured products, particularly where no considerations of public health and safety are involved. The powers of Congress to legislate in this field are not, of course, constitutionally limited to matters affecting public health and safety. Moreover, however sound the policy may be to limit Federal Government control over most manufactured products to health and safety considerations, we do not believe it is, or can be, the controlling policy in the television allocations problem. The congressional policy enunciated in the Communications Act is to "encourage the larger and more effective use of radio in the public interest." That is the policy clearly, which must control here. It is not based primarily upon considerations of health and safety, but rather on the same considerations which form the basis for all Federal Government control of radio, that is, the status of the radio frequency spectrum as a vital national resource, and as a most important instrumentality of interstate and foreign commerce.

[1] Communications Act of 1934, as amended, sec. 1.

We, therefore, believe the real issue here is whether the Commission is sound in concluding that this legislation is essential if we are to protect the interest of the public in this important instrumentality of interstate commerce. If, indeed, that conclusion is sound, then the public interest in the use of this instrumentality should not be frustrated by the fact that the public health or safety is not involved. In any event, enactment of this legislation need not constitute a precedent for general Federal Government regulation of manufactured products where public health or safety is not involved, because we are here concerned with a unique case involving utilization of a limited and invaluable national resource, that is, the radio spectrum.

Let's see what we're talking about. We brought some television sets along today.

On the left is a VHF television set. This is the television set most of us own—there are 46 million in American homes.

If you look at the dial, which you can't see from where you are, there is no room for anything more than 12 channels.

The next set shows a minor cure for the existing VHF set. It is called strip conversion. One single UHF channel is routed through the set, making it capable of receiving 13 channels. It's used when a community finds a way to open up such things as educational television—or one commercial broadcaster decides to take a chance. But Americans move about—and certainly Washingtonians move as much as most. And the conversion for, say, channel 20, is useless if the next town has channel 44. The set, in effect, returns to 12 channels—unless the owner has a new strip conversion done.

So we try again. We take a regular VHF set and this time we add a little black box, to achieve what is called a converted receiver.

This is the third set from the right.

Here, a converter has been added, to bring in all UHF signals operating in the area and to convert each of them to an impulse suitable for VHF reception. What you see is channel 26, Washington's new educational channel. The program in progress is being watched in 8,000 schoolrooms right now and in thousands of homes.

But to do this, it was necessary to bring about a major cure—the addition of a converter.

Why? Because almost all the television sets being manufactured today leave the factory with a part missing. They do have a tuner—the part you use to select a channel. But it's a VHF tuner, like this one.

Right here in my hand, however, is the little part left out. It's the UHF tuner—a simple key to the full, rich promise of television.

Now when this key is put into the set at the factory on the assembly line, we then have what you see at the left, the fourth set, which we regard as the reason we are proposing this legislation.

This set has no strips and no converters. It has 82 channels of choice. We call this the all-channel receiver. It is born complete to receive every station in every market.

The CHAIRMAN. While we are on that, on the all-channel set, you say there are 82 channels?

Mr. MINOW. Seventy U's and 12 V's; yes, sir.

The CHAIRMAN. And it is capable of receiving that many?

Mr. MINOW. Yes. Not all of these would be assigned to a particular community, but the set is capable of receiving that many.

Let's say that you buy that set and the particular community you lived in has channels 2, 5, 7, 60, and 73. You can get them with that set. Then you move to another part of the country——

The CHAIRMAN. Presently the ones we are most familiar with, is the television set with channels up to 13. And this type would have the same thing except that it would have on the dial places for 3, 4, 5, more, which would be the UHF's within that area?

Mr. MINOW. No; that particular one goes from 2 to 83, I believe.

Mr. MEYERS. The way this set is made the VHF tuner receives the 2 to 13 and the UHF dial takes it all the way up to 83.

The CHAIRMAN. You mean you have got 70 places on that second little dial?

Mr. MEYERS. Yes. The difference is that the second dial is much like your own radio tuner, it is a continuous tuner, instead of clicking from station to station you just go right past it.

The CHAIRMAN. And what do you have on there to show what you get?

Mr. MEYERS. There are numbers that show you what range you are in. I am a novice, too; I am just learning. I think I can go off 26 and get on again.

Mr. MINOW. The point here locally is—have you got 26 on?

Mr. MEYERS. Yes.

Mr. MINOW. The picture you are seeing on the two sets on the right you cannot get on the VHF set, which is the one that almost everyone owns, it is incapable of receiving it. And the addition of this little tuner here at the factory makes it possible to receive any UHF station that is broadcasting in that area.

Mr. FRIEDEL. Couldn't you get it on the other one——

Mr. MINOW. You can get it with the strip tuner.

Mr. FRIEDEL. Will you tune the second one in with those stations?

Mr. MINOW. The trouble with that one is, that is the only additional channel that that set can get. If you move to Virginia and that channel was not broadcasting there, then you would have just spent the money to convert it to a channel that you could no longer receive.

The CHAIRMAN. You may proceed with your statement.

Mr. WILLIAMS. Do I understand that on the UHF strip you are limited to seeing one UHF station, you cannot put two strips on that and see three?

Mr. MINOW. I think you can get as many as three strip conversions on one set, I think that can be done.

Mr. WILLIAMS. Approximately what does it cost for the conversion?

Mr. MINOW. About $12 at the home when it is put in for one strip conversion. The black box converters cost about $25.

Mr. WILLIAMS. What about the all-channel set?

Mr. MINOW. The all-channel set, to my surprise, there was one advertised here in the paper the other day at the same price as the VHF set.

Mr. ROGERS of Texas. Would you yield?

Mr. WILLIAMS. Yes.

Mr. ROGERS of Texas. The VHF set with converter, does the converter make the set able to receive just like the all-channel set?

Mr. MINOW. Yes. But it is not a part of the set, and it requires a separate installation in the home—let's say that you wanted to get

channel 26, all of us right here in Washington. You would have these choices: You could buy the strip converter and have it put on your present set, which would enable you to receive channel 26. You could buy the little black box converter and you could receive channel 26 and all other UHF channels, or, if your television sets were worn out and you wanted a new one, you could buy an all-channel set.

Mr. ROGERS of Texas. What is the price of that little black box?

Mr. MINOW. $25. Some are higher, but I think that particular one is $25.

The CHAIRMAN. Mr. Chairman, I have a television set in my home on which we can get only channel 26 UHF. Does it have a strip in it?

Mr. MINOW. You must have a strip converter in it. I might add, it would be interesting for the committee to know we are selling in this country about 6 million television sets a year. While this hearing is going on, there are a couple of thousand television sets being sold in the United States. If these were all-channel sets, then over a period of years, 4 to 6 years, as people replace their present sets or buy new sets there would be this conversion to make possible—that is the theory of our bill, that this is the most painless way that we know to achieve a broad use of the television spectrum.

Mr. YOUNGER. Mr. Chairman, is it possible to receive the color television on both the UHF and on the all-channel receiver?

Mr. MINOW. Yes; it it. And in our test in New York, we are testing color on both the VHF and UHF; yes, sir.

Mr. MOULDER. Mr. Chairman?

The CHAIRMAN. Mr. Moulder?

Mr. MOULDER. Does this converter or the apparatus you referred to there extend the range of reception?

Mr. MINOW. No; I think not. The antenna, the installation of the antenna might affect that, but the converter itself would not, sir.

Mr. HEMPHILL. Mr. Chairman, where are the antennas for those particular sets?

Mr. MINOW. These have indoor antennas. I meant to mention that, Congressman Hemphill. In the experiment we are running today, there is no outdoor antenna on any of these four sets.

Mr. HEMPHILL. Will that set on the right get Baltimore UHF if there were such a station?

Mr. MINOW. If it were a high-powered UHF, I think yes, but I couldn't answer it authoritatively.

Mr. HEMPHILL. There was some testimony here yesterday, and I thought you could illustrate for the committee, that the geographic lay of the land, what we call the contours of the land, as well as the trees and the forests, would have some effect. And, of course, we are up pretty high. But a fellow who can't afford a four-story apartment and has to be on the first floor, he is just cut off from everything isn't he, on the UHF?

Now, on the VHF we all know he can get the service, but on the UHF he is just cut off?

Mr. MINOW. I think not, sir. The cities that I mentioned earlier, there are about eight in the country that are on all UHF, have not experienced that. It is true that the UHF signal does not go as far as the VHF.

Mr. HEMPHILL. A fellow couldn't get Baltimore because a UHF signal isn't strong enough to get here from Baltimore?

Mr. MINOW. It would depend on the power of the station. I can't get Baltimore V's on my television set; it depends on a lot of different factors. But it is true that the U does not go as far as the V; that is the fundamental point.

Mr. HEMPHILL. Then we would go back to the 1,441 U's that are not used?

Mr. MINOW. Yes, sir.

Mr. HEMPHILL. They are in areas where it would be impractical from a financial standpoint because they are in the less populated areas; it would be impractical from a distance standpoint because they are wide areas with wide spaces, in many instances, in the West; so it is just not practical for many of those at all, is it, because the signal is no good to the people, because they can't get it?

Mr. MINOW. For some, perhaps, but not for all. Most of the U's that are unused are not in low populated areas. There are three unused U's here in Washington.

Mr. HEMPHILL. Well, if you had a U in Washington and your house was behind a building or something, would the U reach it?

Mr. MINOW. Yes, sir.

Mr. HEMPHILL. But it wouldn't reach it in Baltimore, would it?

Mr. MINOW. Probably not. But it would depend upon the power. I couldn't answer that one authoritatively.

Mr. HEMPHILL. Or Fredericksburg?

Mr. MINOW. That would be marginal, we would think.

Mr. HEMPHILL. Thank you, sir.

Mr. MACK. I would like to follow through on what Mr. Hemphill said. I understand in New York you are conducting your test because of interference from buildings and various obstacles. I understood in your reply to Mr. Hemphill you said there would not be that type of interference from apartment buildings. And there is some inconsistency there.

Mr. MINOW. I think not, Congressman Mack. The purpose of the test in New York is because of the very high buildings. That is why New York was selected. A four-story building is not going to make any difference to a U or a V signal. The purpose there is because you have the——

Mr. MACK. If you will permit me to interrupt, Mr. Hemphill was talking about the first level of small apartments that interfere just as much as high buildings.

Mr. MINOW. No, sir, even in New York our preliminary tests show no difference between the U's and the V's so far, no significant difference between the U's and the V's so far in the areas that have been measured.

Now, where you can find the difference is when you go out farther from where the signal is being transmitted. That is where you are finding the difference, because the U does not go as far as the V.

Mr. MACK. You are making a good argument this morning in favor of putting the UHF stations in the metropolitan centers, where you have the concentration of the population——

Mr. MINOW. It may well be that somewhere down the road 10, 15 years from now, when everybody has a television set equipped to

receive U's and V's, we will have to take a look at that. But we are trying to avoid all that dislocation, that is the purpose of this legislation.

Mr. MACK. Mr. Chairman, I have some questions, but I will withhold them until the Chairman finishes his testimony. I will ask one other question now.

Isn't it true that the manufacturers were producing all-channel sets in 1953?

Mr. MINOW. About 20 percent of the sets manufactured in 1953 were all-channel sets.

Mr. MACK. And you could receive all of the channels just as you can now?

Mr. MINOW. On 20 percent of the sets.

Mr. FRIEDEL. What is the difference in cost?

The CHAIRMAN. He just testified that he saw one place in town where all-channel sets were the same price as the V, and that most of all of them were discount houses now.

Mr. MINOW. Is the question how much more would the all-channel sets cost?

Mr. FRIEDEL. Yes.

Mr. MINOW. Our estimate today is around $25. Now, it is our judgment that with mass production and with a lot of attention and effort being given to improvement, that could be brought down.

The CHAIRMAN. I think you had better finish your statement, Mr. Chairman.

Mr. MINOW. Why should any television set leave the factory incapable of receiving 85 percent of American television allocations? If we could have all-channel sets, we would have a necessary precondition for fulfillment of the promise of the FCC plan:

A total of 2,225 televisions in the United States: 681 on VHF, 1,544 on UHF.

As to the matter of cost: All-channel receivers will probably cost more, at least at the outset. The best available information indicates an initial increase in the neighborhood of $25. However, when the benefits of mass production and possible production and design improvements are fully realized, we hope that the price differential will be less and the product will be improved. We think this is a small price to pay to unlock an additional 70 television channels—and to add the capacity for so much diversity and variety of service to the public.

We also believe another aspect of the cost factor should be considered. That is the Federal excise tax on television receivers. The Commission supported, as far back as 1956, a proposal that Congress remove the excise tax on all-channel receivers. This suggestion was never adopted. However, we think that, in conjunction with passage of H.R. 8031, Congress may again wish to consider removing the excise tax on all-channel receivers. This would be a means of alleviating or diminishing the burden on the public of paying more money for all-channel receivers. We recognize, however, on the basis of previous experiences, that the chances of obtaining such tax relief for the manufacture of all-channel receivers do not seem promising.

A question has also been raised concerning the fact that, in many instances, viewers may need outdoor antennas to receive UHF, and

that they may not spend the additional money for them, particularly if they are receiving VHF service in their area. There is no doubt with the type of equipment now available more viewers will need outdoor antennas to receive UHF. However, with the anticipated improvement in both UHF receiving and transmitting equipment, we would hope that the need for outdoor antennas would be no greater for UHF channels than for VHF channels. In any case, we do not believe that this is of sufficient importance to prevent the all-channel legislation from accomplishing its purpose of making available a very substantial nationwide audience to receive UHF signals.

We have carefully considered the objection that the legislation we proposed would give the Commission more authority over television receivers than is necessary to insure that such receivers are capable of receiving all channels. We have concluded this objection is a valid one. We are prepared to work with the committee on a revision of our proposal which would make it abundantly clear that the Commission's authority over the performance capabilities of television receivers would be limited to insuring that such receivers are capable of receiving all channels allocated for television broadcasting. We are certain that language satisfactory to all concerned can be worked out.

Now we would like to turn to the other proposals which this committee is considering. Of particular interest are H.R. 9267 and the four other bills identical to it.

To the extent that H.R. 9267 would confer authority on the Commission to require manufacture of all-channel receivers, it is, of course, similar to the Commission's proposal. However, H.R. 9267 would couple with that authority another provision which would withdraw from the Commission the authority to delete any VHF television assignment "made in any community on or before September 1, 1961," if the purpose of the withdrawal was to have all television stations in that community operate on UHF channels. In other words, the latter provision would forbid the Commission to deintermix any community to all UHF operation.

The Commission strongly believes that the all-channel receiver legislation should not be tied to the question of deintermixture. We urge you to give these matters separate consideration on their individual merits.

We wish to reiterate our firm conviction that the public interest requires use of all 82 channels allocated for television, and that the all-channel receiver legislation is an essential step in achieving that end.

We have considered the possibility of going to an all-UHF system. As you know, Commissioner Lee is a strong advocate of that course. However, the rest of the Commission is not prepared to adopt that solution. It would, of course, involve tremendous dislocation. Moreover, we believe there is a definite need for using both VHF and UHF television channels, particularly in the very densely populated portions of the country, to achieve our allocation goals.

As this committee is aware, the limited development of UHF after the adoption of a nationwide intermixed allocations structure in 1952 led the Commission to examine deintermixture as one possible means of encouraging UHF and providing for effective local compe-

tition until more basic remedies became available. In 1955, five communities were examined for possible deintermixture as an aid to the overall problem. While the Commission decided not to delete the VHF assignments in those cities at that time, 1 year later it instituted separate proceedings which contemplated the deintermixture of 10 communities. After the submission of comments by interested parties, the Commission determined that in 5 of the 10 markets deintermixture was warranted at that time.

To assure that particular communities would not be limited to one-VHF-station monopolies, and that multiple services would flourish, a majority of the Commission felt that deintermixture might be a method of correcting unhealthy situations in certain markets. By preventing one station from dominating a market, other benefits emerge. The entry of new television stations may be encouraged and existing stations may improve their facilities in order to render more and better service to the public. This makes possible a wider distribution of advertising business directed to the particular area. In some instances, deintermixture of one market may free a VHF channel for use in predominantly VHF areas which have a need for additional service but where UHF stations cannot be successfully established. Alternatively, the deleted commercial VHF channel may serve as an educational outlet in the same or a nearby community. In short, some of us have felt that in certain situation deintermixture offers at least one possibility for a healthier competitive situation, a greater choice of service to the public, and avoidance of one-station monopolies. On the other hand, we are not unaware of the forceful arguments which are advanced against deintermixture.

We wish to emphasize again that we do not conceive of deintermixture as a general or long-range solution for the television allocations problem. As we stated earlier, we believe we will need an intermixed television system using both UHF and VHF channels, and that all-channel receiver legislation is the key to that long-range goal.

In particular, the Commission would give great weight to any loss of service to the public. It was for this reason that when the Fresno area was deintermixed we provided for a transition period. During this period the existing VHF station operated on the new UHF channel as well as the VHF channel. This was permitted in order to ascertain those areas not reached by the UHF signal. Translators were then installed to provide an acceptable signal in those areas. By this procedure provision was made for continued service to the public with minimal dislocation. And, let me assure you that possible loss of service to the public has always been, and always will be one of the most critical factors in determining whether or not deintermixture in any given situation will serve the public interest. For example, there have been several examples in the past where the Commission refused to finalize deintermixture proposals because of the loss of service that would have resulted to the public.

On July 27, 1961, deintermixture proceedings were instituted in eight communities, in each of which only one VHF station was competing with one or more local UHF stations, and in which there were appreciable numbers of television sets capable of receiving UHF signals in the hands of the public. The questions which we will have to decide in these proceedings are varied and complex, and are directed,

in part, to the very important matter of assuring that the public does not lose service.

However, even if a study of our outstanding proposals reveals the undesirability of effectuating deintermixture in any of the eight markets, we feel that we should be free to take cognizance of special future circumstances. Because of the difficult questions involved, many of which are of a highly technical nature, we do not think that blanket judgments as to the advisability of deintermixture for all times and all circumstances can be made.

In any event, we believe that a statutory prohibition against deintermixture would be unwise. It would serve to deprive the Commission of the flexibility which our experience indicates is an absolute necessity in dealing with the infinitely various and constantly changing conditions in this dynamic industry. And we should keep in mind that in 1955 the Senate Commerce Committee was urging the Commission in the strongest possible terms to adopt a broad program of deintermixture.

We therefore strongly urge that Congress not impose statutory restrictions in this field. Regulation must be addressed not only to the problems that face us today, but also for those which the future may bring. The public interest may require that we take actions—today, in 5 years, or in 10 years—to further nourish and encourage UHF, to cope with unexpected developments, or to take care of particular individual situations.

But, while we believe that the proposed restrictions would not serve the public interest, we wish to emphasize that at all times we welcome congressional guidance on broad policy issues, particularly those concerned with the establishment of a truly nationwide, competitive television system.

Let me make perfectly clear that if the all-channel receiver legislation is enacted, it will certainly be an additional factor to be considered in determining whether or not the public interest will be served by deintermixture. We would hope that mere enactment of the legislation would encourage UHF. Time should start to run in favor of the UHF stations. For example, they can look forward to UHF receiver saturation not only in their home cities, but in the surrounding rural areas as well. This, in turn, should provide an incentive for the UHF stations to increase their power in order to be able to serve the rural areas, and to compete on more equal terms with the VHF station in the community.

We do not mean to imply that passage of the all-channel receiver legislation will necessarily insure survival of all UHF stations now struggling against VHF competition. The question of whether a particular UHF station will survive will doubtless depend on a great many circumstances, particularly the economic viability of the station at the present time. But enactment of this legislation would obviously be relevant to our determination of whether deintermixture in any particular community would serve the public interest.

We should also like to comment briefly on the other legislative proposals which this committee is now considering.

H.R. 9349 would amend section 307(b) of the Communications Act to make it unlawful for the Commission, in allocating VHF and UHF television channels, to give any undue or unreasonable preference or

advantage to any particular municipality, locality, or region, or to subject any particular municipality, locality, or region to any undue or unreasonable prejudice or disadvantage.

As you know, section 307(b) of our act now directs the Commission to "make such distribution of licenses, frequencies, hours of operation, and of power among the several States and communities as to provide a fair, efficient, and equitable distribution of radio service to each of the same."

In our opinion, any assignment by the Commission of VHF or UHF television channels which would result in the type of undue or unreasonable preference, advantage, prejudice, or disadvantage referred to in H.R. 9349 would clearly be unlawful under the existing provisions of section 307(b). We therefore believe that the prohibition proposed in H.R. 9349 is unnecessary.

House Resolution 450 and House Resolution 457 would express the sense of the House that the Commission should take no further action in its deintermixture proceedings until the UHF study now underway in New York is completed. As we have indicated previously, the primary purpose of the New York experimental station is to determine whether UHF television will serve satisfactorily in a "canyon" city such as New York. But even without the full results of the New York test we are fully convinced, on the basis of ample practical experience, that UHF can, generally speaking, furnish a satisfactory service to the public. We therefore believe that no useful purpose would be served by requiring the Commission to postpone its determination with respect to pending deintermixture proceedings until the New York study is completed.

House Resolution 469 would express the sense of the House that the Commission should not require any operating VHF station to shift its operations to a UHF channel. We have already indicated our position with respect to this problem.

Finally, let me return to the all-channel receiver legislation to summarize the very important matters which we feel are bound up in the fate of this proposal. Specifically, I am referring to H.R. 8031, the bill introduced by Chairman Harris at our request.

First, the future of educational television is tied to UHF.

Educational television now holds 90 VHF assignments and 184 UHF assignments. But educators estimate they will need a total of at least 97 additional VHF assignments and at least 825 additional UHF assignments to serve educational television needs throughout the country. If Congress approves the pending legislation to provide financial aid for the construction of educational television stations, this will certainly increase the chances that a considerable number of educational stations will go on the air.

Second, those communities which need a local television outlet certainly have a stake in UHF.

There are now some 83 areas in which one or more UHF stations were once in operation but are now silent, at least in part because of lack of UHF sets to receive their signals. Twenty-five of those areas now lack any local station, and 58 lack the choice of service which a second, third, or fourth station once brought. Allentown, Pa., Atlantic City, N.J., and Battle Creek, Mich., are specific examples of cities which no longer have a local television station.

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And there are scores of other communities where capital has never been risked to build a local station because of the chilling example of the Allentowns and the others. Communities such as these will never have a fair chance for a local station—unless UHF gets a fair chance.

We wish to reiterate our firm and unanimous belief—and I emphasize the Commission is unanimous in this—that the all-channel receiver legislation is essential. Without it we may well be permanently wedded to an inadequate, noncompetitive 12-channel system. And a nation that will soon number over 200 million people—with increasing income and education—such a nation requires healthy growth in the broadcasting outlets which can occupy its leisure, stimulate its interest, and service its flourishing economy.

We wish to thank you for the opportunity to appear before you today. The other members of the Commission and I will do our best to answer any questions you may have.

The CHAIRMAN. Thank you very much, Chairman Minow, for what I think is a very fine statement on this highly important and complicated problem. It is clear, concise, and states the views of the Commission regarding this entire subject matter.

Mr. Williams, any questions?

Mr. WILLIAMS. Mr. Chairman, I would like to join you in congratulating the Chairman on an excellent statement of their position on this subject. It is a complicated and difficult problem which evades any simple solution, as you can understand.

Let me see that I understand the problem that is before you correctly. I may be oversimplifying it.

We have the several VHF channels in operation today, all over the country. They are limited to what—12 or 13 channels?

Mr. MINOW. Twelve, sir.

Mr. WILLIAMS. Twelve channels. You have some 80 available channels for UHF broadcasting.

Mr. MINOW. Seventy, sir.

Mr. WILLIAMS. The purpose of the Commission is to bring about an orderly usage or transition in this field, so that a maximum number of channels will be available to the public, is that correct?

Mr. MINOW. That is correct, sir.

Mr. WILLIAMS. Well, that, of course, will increase the competitive aspect of television broadcasting.

Now, your problem, as I understand it, is primarily concerned with two things. One is the question of whether or not a given VHF station should be converted to a UHF station in order to serve the public interest.

Mr. MINOW. Well, I would like to try to set this up chronologically, if I could.

Mr. WILLIAMS. That is with reasons, which would indicate that it would serve the public interest, and the problems which would be connected with such conversion. Is that not basically the problem?

Mr. MINOW. That is right. But I would like to set out the matter chronologically, to show you how this has developed.

The Commission, in February of 1960—before I was there—came to the conclusion that the long-term solution to this was the all-channel receiver legislation. We did not know if this had much of a chance.

It is a novel approach to the problem. In the meantime, we were pursuing other courses to try to achieve a competitive situation.

In the summer of 1961, we proposed, as we have done in the past in other communities, the possibility of deintermixture in a certain eight cities which had certain common characteristics; one VHF channel, only one, one or more U's, and a population which already had a lot of UHF sets converted.

Now we are here in Congress——

Mr. MACK. May I interrupt to just ask if there was any population test in these areas selected?

Mr. MINOW. No. The criteria, I think, were the ones that I have mentioned.

Now we have come to Congress for a hearing on our all-channel received, and we find that the two have been tied together here in certain bills. We think the two are not related, and we view the all-channel received as a long-term solution to try to do this in the least painful way. I wish there were a painless way to try to solve it. There is not. The other is a possible short-term solution in certain particular communities. It is not a national or a long-term solution of the problem.

Mr. WILLIAMS. Does the transition of transmission equipment from a given VHF channel to a given UHF channel require much expense on the part of the broadcaster?

Mr. MINOW. It can, sir. In some instances, in a high-power station, it can run as high as a quarter of a million dollars.

Mr. WILLIAMS. Now, with respect to the legislation which would require that all television receivers shipped in interstate commerce or imported into the United States shall be all-channel receivers, does that take into account the wide usage of closed-circuit television?

Mr. MINOW. I think——

Mr. WILLIAMS. Should consideration be given to providing an exception for sets which would be used exclusively on a closed-circuit basis?

Mr. MINOW. I think——

Mr. WILLIAMS. Or does that constitute a problem at all?

Mr. MINOW. Well, I am frank to say we have not considered it. I think from a manufacturing point of view, it would probably cost more to make those few closed-circuit sets separately than to run them through the assembly line on the all-channel basis. But this is one we really have not considered. The number of sets used for closed circuit is a very small percentage of the output.

Mr. WILLIAMS. Then am I to assume that you do not consider that to be a problem in connection with this matter?

Mr. MINOW. I think not—I think that is right, sir.

The CHAIRMAN. Mr. Springer.

Mr. SPRINGER. Mr. Chairman, I heard your testimony before the Pastore subcommittee. I read your statement here today. I think I understand your position.

Now, may I say this before I start any questioning. I raised this question long years ago—in the spring of 1953, in the month of April. I was sitting in the chair that is occupied by the gentleman from New York, Mr. O'Brien. I am trying to recall whether it was Mr. Hyde or Mr. Walker who was Chairman of the Commission at that time.

Mr. HYDE. In 1953, it would be me.

Mr. SPRINGER. Then it was Mr. Hyde. I raised this question of whether the Commission had considered and adopted a policy before the flood of grants which were made in May and June and July and the remainder of 1953. So I raised this question a long time ago. I knew what it was. I have lived with it since then.

Now, we have not gotten everything we want. But we are starting in today with an entirely different premise on the 6th day of March 1962 than we had in the month of April 1953, as to what can be done in this field.

I think Senator Pastore brought home to you the practical problem that is involved. He used these words. May I quote them? "Will you take this to heart." Those were his words. Am I quoting him right?

Mr. MINOW. I believe so.

Mr. SPRINGER. All right. Now, at that time he said, "Mr. Chairman, will you go back to your Commission"—I think I am quoting him word for word—"will you go back to your Commission and see if you can come up with something that will be a solution to this problem?" Now, have you taken it to heart, and have you taken it up with the Commission, and are you ready today to present a solution, a practical solution which can be adopted by this committee, by the same committee in the Senate, and can pass both Houses of Congress? Or one that we consider has a reasonable chance?

Mr. MINOW. We have taken it to mind and to heart, Congressman Springer. This statement that I have read this morning represents our effort to try to meet the problem.

Obviously, I cannot commit the Commission to any position with respect to cases which are pending before it. This would be wholly improper for me to do. The rulemaking—the Administrative Procedure Act and everything, prohibits us getting into those pending matters before us.

What I have tried to spell out here is that the Commission would certainly give great weight to any expression of congressional policy in this field, drawing a distinction between overall policy and getting into any particular cases or communities. That is the view that I have tried to express.

Mr. SPRINGER. Now, Mr. Chairman, I can well understand why you would like to have a statement of congressional policy rather than to have a law. And may I refresh your recollection, being a lawyer, that in the case of Champaign, Ill., which I am explicitly acquainted with, as is Mr. Mack—in that case you have had two instances of where there has been an attempt to deintermix. The Commission has gone on record unanimously in the hearing and on a rehearing—I believe I am right—if I am not mistaken, it is not over one Commissioner, and I will not be a liar for only one Commissioner—but anyway, you have gone on record as being against it.

Now, let us go to the case of Hartford, Conn., which is even more extreme—a case where, in my opinion, their Congressman stated it well yesterday. They have been constantly harassed since they got a license. I believe I quote him correctly when he said there had been six separate proceedings filed before the Commission to deintermix, or to do something, to get him to change from one to the other.

Now, does that not give us reason to pause on this committee as to why we are unwilling to accept a resolution or a sense of Congress?

Now, may I say I believe that Brutus is an honorable man, and I have said that to you before, and not in a satirical way. I think probably if we did that, you would abide by it. I do not know that you are going to be here all during the time that this is going to be under consideration. Perhaps other Commissioners will probably go as time passes. That is the way that things happen. That is why we are unwilling to take that—at least I am unwilling to do that.

But I do want to give you, I think, by reiterating what Senator Pastore has said—the practical problem of why we on this committee are unwilling to accept that.

Now, may I develop this a little bit further?

You, I am sure, do not mean to tell the committee that you did not have under consideration any other markets than these eight which are mentioned in this order of July 1961.

Mr. MINOW. Oh, I think we are always studying these possibilities. These are the eight, as I say, that were selected by a 4-to-3 vote, as you know, of the Commission on the basis of the criteria that I have mentioned—one V, only one V, one or more U's, and a population already possessing a lot of UHF sets.

Mr. SPRINGER. Now, at the time the staff made a study, did it not?

Mr. MINOW. Yes, sir.

Mr. SPRINGER. Previous to that. And did they not include some other cities?

Mr. MINOW. I believe there were an additional seven.

Mr. SPRINGER. Those seven—Montgomery; Lancaster; Harrisburg; York; Columbus, Ga.; Baton Rouge, La.; Fort Smith, Ark.; Bay City, Saginaw, Flint, Mich.; Lake Charles, La.; and Knoxville, Tenn.

Mr. MINOW. Montgomery is included in the eight.

Mr. SPRINGER. Well, we will leave that out. With that exception, is the list correct?

Mr. MINOW. I think that is right, sir.

Mr. SPRINGER. Now, may I ask this?

For the benefit of this committee, would you be willing to produce that study that was made by the staff as it was presented to you, without amendments?

Mr. MINOW. Could I consult my colleagues a moment?

Mr. SPRINGER. Yes, sir.

Mr. MINOW. Congressman Springer, I would like very much to have a chance to present this to the full Commission. And also I would like to have an opportunity to study it. I would like our General Counsel also to tell us whether this would have any effect on our pending cases. So if it is agreeable, I would like to reserve that and give you an answer in a day or so in writing.

Mr. SPRINGER. All right. And if it is agreeable, will you agree to supply all the members of this committee with a copy of that study, please?

Mr. MINOW. Surely.

Mr. SPRINGER. The reason I have raised this is that at the time this order was entered, in the summer of 1961, actually you did at that time contemplate that this was merely an opening, a start, am I correct on that?

Mr. MINOW. I think in the order we said there might be further ones. But I emphasize we are not sure we are going to do these.

The point we are trying to make is that our present situation we do not think is satisfactory. This proposal is one method to try to achieve a solution in those eight places.

Mr. SPRINGER. Mr. Chairman, you are familiar with your order, are you not?

Mr. MINOW. Yes, sir.

Mr. SPRINGER. On page 4, under paragraph 9, "deintermixture," I read these four lines.

It is contemplated that, as indicated by further studies and developing circumstances, and in response to further proposals, additional deintermixture proceedings will be initiated in further markets at a later time.

Mr. MINOW. That is right.

Mr. SPRINGER. The Commission meant at that time what it said.

Mr. MINOW. That is right. Except I call your attention to the next paragraph, paragraph 10, as well.

Mr. SPRINGER. The next paragraph?

Mr. MINOW. Yes. I wish you would read that one, too.

The CHAIRMAN. Well, you may read it in the record.

Mr. MINOW (reading):

Paragraph 10. If Congress enacts the receiver legislation requested by the Commission, as referred to above, the passage of time will bring an ever-increasing number of all-channel sets. If the achievement of set compatability in itself is enough to provide incentive for the building of UHF stations, and to permit their successful operation, then perhaps a satisfactory system of intermixed assignments can be achieved.

Additionally, improvement which the legislation can bring about on the receiver incompatability problem would in time make possible a more thoroughgoing reallocation of channel assignments, looking toward providing substantially all UHF assignments in certain areas of the country where population is dense, and communities capable of supporting television stations located close together.

I could go on and read the whole paragraph, or put it all in the record, if you like.

Mr. SPRINGER. I think that is perfectly all right.

Now, you have another sentence a little later on.

Unless it be found later that all television can be shifted to the UHF portion of the spectrum, such a regional deintermixed system may permit the most effective possible use of the 82 channels now allocated to television. Does that not contemplate further deintermixture?

Mr. MINOW. It said "may," Congressman Springer. This is an exploration; yes, sir.

Mr. SPRINGER. You would say that this does contemplate it, does it not?

Mr. MINOW. I think you have got to take this in the context of the proceeding. This is a proposal, under the Administrative Procedure Act.

If you look at the title of our document, the very beginning, it says:

In the matter of fostering expanded use of UHF television channels.

This is an overall statement of ways and means we might take.

Mr. SPRINGER. All right. But the point I am making is that you were contemplating additional deintermixture.

Mr. MINOW. As one possibility; yes, sir.

Mr. SPRINGER. Now, Mr. Chairman, I notice in your statement that you want to separate all-channel receiver bills, not tied to deintermixture.

Mr. MINOW. We proposed it separately; yes, sir.

Mr. SPRINGER. Are you willing to take a bill, an all-channel bill, which is tied to deintermixture?

Mr. MINOW. Well, I do not think it is a matter of what I am willing to take that is going to decide this. The Commission attempted today, Congressman Springer, to express our view in this statement and the reasons for it. We would hope to persuade you to these reasons. If not, obviously the decision is going to be up to Congress. We will be in further consultation with you. It is not up to us.

Mr. SPRINGER. Mr. Chairman, may I refresh your recollection from the Pastore hearing.

Mr. MINOW. Yes, sir.

Mr. SPRINGER. I cannot remember who asked this question, but one of the Senators did. If you had to choose between the two, as to which you believed would do the best job, either deintermixture or all-channel receiver, do you remember what your answer was?

Mr. MINOW. I do not remember, but I would assume it is the same answer I gave you today, and that is that the all-channel receiver is a long-term national solution.

Mr. SPRINGER. And it can be the solution to it, can it not?

Mr. MINOW. Pardon me?

Mr. SPRINGER. It can be the solution to it, can it not?

Mr. MINOW. It could be on a long-term basis; yes, sir.

Mr. SPRINGER. Without deintermixture.

Mr. MINOW. Yes, sir; it could be.

The CHAIRMAN. Will the gentleman yield?

Mr. SPRINGER. Yes, I yield.

The CHAIRMAN. I imagine this thought is going to be expressed by a good many members of this committee. In order to save time, let me ask you this question.

Is the Commission in a position to make a representation to this committee that if legislation providing for all-channel receiving sets is provided, the Commission would see its way clear to postpone any further consideration of all deintermixture proceedings until such a time when you can see on the basis of actual experience how it will work out. This may require 5, 6, 7 years?

Mr. MINOW. May I consult my colleagues who are here?

Mr. Chairman, only four of us are here. But I think it is fair to state our general consensus is that we would like to come back here with a written specific suggestion along the line of your question. It is a little more complicated than that, however, because we have certain deintermixture matters which have been going on for years which are in various stages of the courts, in which we are not in any position to say we will or we will not.

The principle of a moratorium, I think, is a very fruitful one, and offers a possiblility, because our own thinking, as I mentioned, separates these two views in terms of long-term and short-term solutions. So the principle of a moratorium, I think, is promising. I would suggest that I come back to the committee with a written document from all seven Commissioners which you could consider at that time.

The CHAIRMAN. How much time would you suggest it would require?

Mr. MINOW. I am sure at the conclusion of these hearings we could be back within a week—within a week after your hearings are completed.

The CHAIRMAN. I wish at the same time you would also consider in connection with this statement whether or not you could also make representations that should we come to adopt the principle of a moratorium, before in the future any general policy change would be undertaken by the Commission this committee would be advised.

Mr. MINOW. Yes, sir.

Mr. SPRINGER. Mr. Chairman, we will also take back this consideration—namely, of a moratorium which is written into the language of whatever we pass—that the Commission will not take any further action until Congress presents it.

Mr. MINOW. We will take that into account.

Mr. SPRINGER. That is not like the chairman's proposal. That has a different legal context.

Mr. MINOW. I understand.

Mr. SPRINGER. Mr. Chairman, one of the proposals, as I understand it—and I am now coming to a basic problem of the basis of your current proposal—if you take a V out, we will say, of central Illinois, that you are going to substitute there, or somebody is going to substitute UHF service.

Mr. MINOW. That is correct. What we do actually is offer a U to the existing V licensee.

Mr. SPRINGER. Now, I am asking you what about those in my own area who will not have any television service?

Mr. MINOW. If we found that there were a large number of people going to be deprived of service altogether—that, as I mentioned, is one of the factors we would take into account in deciding whether or not to have deintermixture. That is a matter in these cases that is under hot dispute, with different engineering and technical experts arguing about whether it is so or it is not so. That is why we think those matters have got to be settled, assuming we go ahead in this way, on the record, in the proceedings.

Mr. SPRINGER. Now, I still am just a little vague here as to how you are going to substitute this UHF service.

Mr. MINOW. Well, then, assuming you decide to substitute a U for a V, assuming you have made that judgment, then I can only call your attention to what happened in Fresno as being a practical example. There the V licensee operated simultaneously for a period, I think, of several months on a U and a V. He found out, through engineering tests, which people could not receive the U signal—I think there were three areas. Then by putting in inexpensive translators which are in effect relay devices for the signal, he was able to bring a service to all the people who received the V. I am unaware of a single viewer complaining.

Mr. SPRINGER. If I lived in Fresno, I would agree that it is probably true. Now, Fresno is not the usual situation. You would not contend that, would you, Mr. Chairman?

Mr. MINOW. We had a cooperative licensee in Fresno.

Mr. SPRINGER. And would you tell me how high his antenna was, just approximately?

Mr. MINOW. I think it is on a mountain.

Mr. SPRINGER. I think the Chairman's answer is sufficient. What I am trying to say, Mr. Chairman, in all fairness to just those little, old prairies out there in Illinois—you have crossed them many times—certainly it would have no resemblance to a situation like Fresno.

Mr. MINOW. I know. But I do think that we could take you to other places which are also flat and show you—and some with hills—and show you that U service works. You know, one thing about Illinois, which has become a great cause of controversy here, is that Commissioner Lee and I both come from Illinois and we are just as concerned about that as any of the other 49 States.

Mr. SPRINGER. I hope you will be, because every member of the legislature is very concerned about it, may I say. I hope that you are going to give it every consideration that you can when the time comes to make a final decision.

But putting that aside, I have tried to make some kind of an engineering survey of my own. I am not an engineer, but I have had a little law experience in it. It is my belief that in order to serve my own area, you would have to have several U's put in. Now, there is some difference of opinion among engineers as to whether that would be four, five, or six to give them the same kind of service that they have today. I am talking in terms of similar service. I am not talking about some other service. This is the problem, the immediate problem with which we are faced.

Now, I have very serious doubts, knowing the south end of my community—and may I say Mr. Shipley, on the stand yesterday (and I am sure he knew what he was talking about) said several areas would not be served by anybody. On top of that, and I think this was most important in Mr. Shipley's case—which also adjoins the south end of my district—economically it was an impossibility for anybody to put a U in. There just was not anything there. I mean, he had surveyed the thing pretty carefully.

Now, I do not think your people have done that. That is the point that we are trying to raise as Congressmen here—that there are going to be a lot of people who simply are not going to be served.

Mr. MINOW. But that is why, Congressman Springer, we are at the stage we are at in this proceeding. We have not decided. We do not even have all the pleadings in yet. I mean, we are like in the middle of a law suit, and not even everybody has filed all their papers. So we have nowhere near even reached a study of the considerations.

Mr. SPRINGER. Well, I hope you are right, because that is why we Congressmen are trying to bring this home to you in this hearing, the problems with which actually we are faced.

In the Pastore committee, Senator Thurmond said, he had one measly little V, and you wanted to take that one out of South Carolina.

These are practical problems.

I think that is what Senator Pastore tried to bring home.

Mr. MINOW. And I assure you that we have gotten the message. But as I pointed out to you, I want to point out to you, Congressman Springer, as I mentioned in our statement, some years ago, where we proposed 10, I think it was, deintermixture, the Commission ultimately on the record then decided on 5. Here we have proposed eight, and we have not even begun to study all the factors involved.

Mr. SPRINGER. Well, without arguing with you, I will say that you certainly have aroused several million people in the country.

Mr. MINOW. I think the broadcasters have aroused them.

Mr. SPRINGER. Let me raise this question about Fresno. I now come to the question of erosion, as to where you stop when you start this kind of proceeding.

You mentioned a minute ago Fresno. How far is Fresno from Bakersfield? Roughly, how far is it?

Mr. MINOW. About 40 miles, I believe. Wait a minute. I would have to check it.

Mr. SPRINGER. Well, my figures are more than a hundred.

Mr. MINOW. More than a hundred? I am sure that's right.

Mr. SPRINGER. It is around that figure. And is it not presently being considered to deintermix Bakersfield?

Mr. MINOW. We have a pending proceeding on it.

Mr. SPRINGER. Now——

The CHAIRMAN. Will the gentleman yield there?

Mr. SPRINGER. Yes; I will.

The CHAIRMAN. Well, is that altogether correct—that you have a pending proceeding?

Mr. MINOW. In Bakersfield—we just had an oral argument. The Commission decided to deintermix Bakerfield in a rulemaking proceeding. That has been appealed to the court. We had an oral argument the other day on a question of procedure involving Bakersfield. But there is a proceeding going on involving the deintermixture of Bakersfield right now.

Mr. SPRINGER. I am not asking for the decision: I am just asking your opinion.

The CHAIRMAN. But I wanted to go a little further, to see whether or not there had been a decision.

Mr. MINOW. There was a decision on the rulemaking point to deintermix, and that is now on appeal to the court of appeals.

The CHAIRMAN. Well, I cannot ask you about the status. I do not want to discuss the merits, for obvious reasons. But I was under the impression the Commission has already advised the operator of the station at Bakerfield, as of December 1, that the V is to be moved out.

Mr. MINOW. That is right. The Commission decided to deintermix; that is correct. The licensee has challenged that on appeal to the court.

Mr. SPRINGER. Now, I want to come to Springfield, Ill.

Now, the Federal Communications Commission did deintermix or made an attempt to deintermix Springfield, Ill., in 1957.

Mr. MINOW. Right. That one is under litigation, too.

Mr. SPRINGER. That is under litigation at the present time. That is back before the Commission. I am not going to go into that.

Mr. MINOW. Excuse me. That one is back now to the Commisison from the court.

Mr. SPRINGER. I am not going to ask the Commission what they are going to decide.

Mr. MINOW. I do not know.

Mr. SPRINGER. It found at that time that this action would be effective with our Champaign VHF located some 65 air-miles away, and the UHF station made the argument that the action would be effective. Now, I want to come a little further.

Now, as a matter of fact, is there not a VHF station in Terre Haute, Ind.?

Mr. MINOW. Yes, sir.

Mr. SPRINGER. Terre Haute, Ind., is located closer to Champaign and Urbana than either WCIA or Champaign is to Springfield. Is there not a UHF station at Danville, which lies between Champaign and Terre Haute, only 43 miles away from the Terre Haute VHF station?

Mr. MINOW. There is a station in Danville. I would take the distances as correct.

Mr. SPRINGER. Now, even if you made Champaign all VHF, would not a large part of the Champaign, Urbana, Danville service area still get VHF service from Terre Haute?

Mr. MINOW. It seems to me this gets me right into the question that is pending.

Mr. SPRINGER. All I ask you is what the service would be. I do not think there is any doubt about that.

Mr. MINOW. There are a lot of arguments about that, I'm advised, pending.

Mr. SPRINGER. About the service?

Mr. MINOW. Yes, sir.

Mr. SPRINGER. Well, I have made my own tests in there. I am going to say to the Commission that in my opinion there is tremendous overcoverage of service.

Now, I can see why you do not answer that—because the next logical step is Terre Haute. And there is only one in there at the present time, in Terre Haute.

Mr. MINOW. There is another one in litigation.

Mr. SPRINGER. There is one in litigation. But there is just one in Terre Haute at the present time.

Mr. MINOW. That is right.

Mr. SPRINGER. There is a question of whether it is even going to be located in Terre Haute. That is one of the questions before the Commission, is it not?

Mr. MINOW. No. I think what we propose to do is put another in. It is involved in that Springfield deintermixture.

Mr. SPRINGER. That is right.

Mr. MINOW. You see, our task is not easy.

Mr. SPRINGER. I understand. The next is Bloomington, Ind., which has a V, and it is 67 miles from Terre Haute. And Indianapolis is about the same distance from Terre Haute.

Mr. MINOW. That is right. And if I am not mistaken, the fellow in Bloomington wants to move.

Mr. SPRINGER. Now, Mr. Chairman, this is the erosion problem which is presented.

Now, maybe the Commission would not do all these things that I am saying. But I will say to you that if you do this in Champaign, there will be immediate proceedings filed, and I would almost wager my life on that, to deintermix some of these that I am talking about at the present time.

Mr. MINOW. You mean proposed by us, by the Commission?

Mr. SPRINGER. No. You do not file all those proposals.

Mr. MINOW. No; but we have to decide, the Commission has to decide, whether to put them out for public comment. One principal

criterion, as I mentioned earlier, was the local set conversion. If you are talking about a community that does not have any UHF sets in it—Terre Haute, Indianapolis, and Bloomington, I'm advised—then you have a missing ingredient.

Mr. SPRINGER. Those are all V's, are they not?

Mr. MINOW. Right. But no UHF conversion in the hands of the public.

Mr. SPRINGER. That is very. But if you have one—where you have just one—that is in Terre Haute, would it not be logical for someone to go in and file a U?

Mr. MINOW. It might. I do not know.

Mr. SPRINGER. Now, Mr. Chairman, I want to come to a second question of service. There is no question that since UHF is shorter range than VHF, if you shift the VHF to a UHF you make the service area a smaller circle, do you not?

Mr. MINOW. That is right, sir; assuming the same antenna height and power.

Mr. SPRINGER. And how much smaller a circle?

Mr. MINOW. It varies in different places, but it cuts—I would say 65 to 70 miles, to about 45 miles, in that vicinity.

Mr. SPRINGER. Now, I am taking the Champaign situation, which I know. I am only taking population. I am not taking the size of the circle. But in the population area, in A, you have roughly 40 percent of the population. In grade B, you have 60 percent of the population, which is several hundred thousand people. That is the one in which Mr. Mack's largest city is located, which is Springfield.

Now, that is in effect what you immediately do if you reduce this A in service; is that not true?

Mr. MINOW. Again, I hate to be unresponsive, but this is a thing that is under dispute in this proceeding.

Mr. SPRINGER. Well, I did not think there was any doubt about what the B and the A grade was in Champaign.

Now, if there is a doubt, I will take all this back. But I did not think there was any dispute, any question, about grade A and grade B.

Mr. MINOW. Could I have Mr. Cox answer that?

Mr. Cox. Congressman Springer, there would be no dispute about the difference between the computed A average or grade B average, in accordance with the Commission's engineering standards. However, in practice, depending upon the signals that are available, people make greater or lesser efforts to receive a particular station. Then also, of course, there is the well-known fact that neither the V nor the UHF signals always fit our calculations. And so in any given situation you would have to determine—and this would be the matter now before the Commission—what stations are received and viewed by the people in the areas under dispute, and what means, if the Commission decided to deintermix—what means would be available, either from improvement of existing facilities or from the use of the supplemental devices, translators, and so on, to assure that there would not be loss of service.

If it were found that there was no way in which significant loss of service could be avoided, then, as the chairman indicated in his statement, this would be a very significant factor in arriving at the ultimate decision in the rulemaking proceeding.

Mr. SPRINGER. Now, you touched on translators. Have you had any real experience with that, Mr. Cox?

Mr. COX. Very considerable.

Mr. SPRINGER. What is your estimate of the satisfaction given by that kind of service?

Mr. COX. In many areas in the West it has been used very extensively and very satisfactorily to extend VHF coverage out there, or UHF coverage.

Mr. SPRINGER. Well, I can only state in my own case, and that is the only thing I can state, and that is the two I have—I can only state this from the complaints I have had. I have turned the television on and I have run into some of the same trouble. It is not a satisfactory situation.

Mr. COX. Well, I was attending a broadcaster meeting in El Paso yesterday. There was a gentleman there from Cortez, Colo. He said that they received better service from their translator, reaching the Tucson stations, than he had been able to get in Tucson itself. They are considerable distance from the source of the signal. Now, this is a VHF station. But this only limits the distance at which you can install the translator. If the translator can receive an acceptable signal of sufficient strength, it will itself then perform its function of relaying that signal to very substantially varying areas, but provides a satisfactory coverage within the limits of its power, which presently is 10 watts.

Mr. SPRINGER. Now, Mr. Chairman, to come back to you for a minute, in these areas which Mr. Shipley testified to in the north end of his district, and which I testified to in the south end of my district, how do you propose to serve those areas?

Mr. MINOW. The first question is what service are they getting now, and then we will have to decide, if we go ahead, on that record.

Mr. SPRINGER. We are getting WCIA service at the present time, which Congressman Shipley testified to.

Mr. MINOW. Right. And if we conclude that any serious substantial loss of service is going to occur, then we would not deintermix.

Mr. SPRINGER. Do you have any particular engineering differences between VHF and UHF that are significant?

Mr. MINOW. Well, certainly there are a lot of differences in the performance of the frequencies, particularly the distance that the signal goes out. I think there are a number of differences. I would rather have one of our technically trained persons answer that.

Mr. SPRINGER. You do have certain taboos, do you not, on UHF?

Mr. MINOW. Yes, sir.

Mr. SPRINGER. Would you explain for the benefit of this committee what you mean?

Mr. MINOW. Mr. Jacobson, who is Commissioner Ford's engineering assistant——

Mr. JACOBSON. Mr. Lyons is the expert on that.

Mr. MINOW. Our Commission expert is here, if you would like to have him answer that.

Mr. SPRINGER. Let me ask you this question.

Now, these taboos which do have to do with reception, do still further reduce the total coverage available from a given number of UHF channels, do they not, in substance?

Mr. MINOW. They—the problem—the taboos really occur in allocation. They reduce the ability we really have to allocate. The viewer will receive the service. The problem is, from an allocation point of view, we cannot make some uses of them as we can in the V's which go out farther.

Mr. SPRINGER. Are you acquainted with Dr. Arthur B. Towne, dean of the College of Engineering of Ohio State University?

Mr. MINOW. No, I am not, sir.

Mr. SPRINGER. Is Mr. Cox acquainted with him?

Mr. COX. You mean Dr. George Towne? Yes.

Mr. SPRINGER. He is probably an outstanding authority in this field, is he not?

Mr. COX. He is an outstanding engineer. He served as the executive director, I believe, of the Television Allocation Study Organization which was set up by the industry some years ago. He is also, I believe, a member of the Commission's National Executive Defense Reserve.

Mr. SPRINGER. At the Institute of Radio Engineers, he made some comments on the technical realities concerning television allocation. Are you familiar with that?

Mr. COX. I believe I read it, but it was some time ago.

Mr. SPRINGER. Would you say, Mr. Chairman, that this is a fair statement, a fair conclusion, which Dr. Towne comes to?

And without taking into consideration the taboos all 70 UHF channels could provide only twice the coverage of 12 VHF channels.

Mr. MINOW. I know that some of our engineers differ. My general counsel tells me this gets us into the substance of some of the matters before us. I do know that our engineers differ with that.

Mr. SPRINGER. Differ from that?

Mr. MINOW. Yes, sir.

Mr. SPRINGER. As far as equipment is concerned, does it take more or less equipment to receive VHF signals than UHF signals?

Mr. MINOW. To receive?

Mr. SPRINGER. Yes.

Mr. MINOW. Well, fundamentally that is the problem of this set. That is the tuner problem.

Mr. SPRINGER. Can you get UHF as effectively indoors as VHF with rabbit ear antenna?

Mr. MINOW. We did it here this morning. There were no outdoor antennas this morning.

Mr. SPRINGER. You sent a reply to a Mr. Workman in Decatur, Ill., advising him on how to improve reception on UHF, WICA, Springfield, with its transmitter located only 25 miles away. This is one of the problems involved—in which all those directions, Mr. Workman still could not get it. And he was somewhat an engineer, I found out in this correspondence. I think you will find it in your file—because I received copies. I want to bring this home to you because of the practical problems we are running into in the reception of UHF.

Now, Mr. Chairman, I am almost at the end of my questions.

Mr. Chairman, if this committee came out of all these hearings, as a result of its deliberations, with a bill which in substance gave all-channel receivers, with another clause which prevented shifting from

VHF, present VHF to UHF, would you object to that? In effect, giving the present VHF's a grandfather clause?

Mr. MINOW. Well, this is, I think, tied to the question the chairman asked me, that I would like to respond to in writing officially from the Commission. I do not think—my personal views I do not think should enter into it one way or the other. I would rather give you a Commission view.

Mr. SPRINGER. That is all, Mr. Chairman.

The CHAIRMAN. The committee will recess until 2 o'clock, at which time you can be back, can you not?

Mr. MINOW. Surely.

The CHAIRMAN. Mr. Mack, you will be recognized at 2 o'clock to proceed with questions.

(Whereupon, at 12:07 p.m., the committee stood in recess until 2 p.m. of the same day.)

AFTERNOON SESSION

The CHAIRMAN. The committee will come to order.

Mr. Mack, you may proceed.

STATEMENT OF HON. NEWTON N. MINOW, ACCOMPANIED BY COMMISSIONERS HYDE, FORD, AND CROSS; KENNETH A. COV, MAX D. PAGLIN, AND TEDSON J. MYERS—Resumed

Mr. MACK. Thank you, Mr. Chairman.

Mr. Chairman, I think that all the members or most all the members of the committee are in sympathy with your objective to utilize more channels or serve more people. But many of us have some very strong convictions on some of these matters; and, of course, we do have a slight difference of opinion as to how that objective should be achieved.

Personally, I can strongly support your proposal for all-channel receivers. But getting to the source of the problem, I never felt that the so-called deintermixture could be successful. In the process I have felt that you would discriminate against certain communities, and in the case of Illinois and several other States, there would be discrimination against those States. And I think a very serious question has been raised as to whether or not it would meet the intent of Congress.

Mr. Chairman, there is one thing I would like to clarify first of all. You have attached to your statement a table of assignments.

Mr. MINOW. Yes, sir.

Mr. MACK. And the table of assignments includes all Commission assignments through January 9, 1962.

Mr. MINOW. Yes, sir.

Mr. MACK. I notice in that table of assignments that channel 2 is assigned to St. Louis, Mo. That, purely and simply, is just not the case; is it?

Mr. MINOW. That is the one that is in litigation; isn't it?

Let me check on that.

It is presently in use in St. Louis, and we have a proceeding pending, Congressman Mack, a rulemaking proceeding pending to move that channel from Springfield to St. Louis.

Mr. MACK. I am aware of the fact that it is in use in St. Louis, and has been for, I think, 4 or 5 years. But the channel is assigned to Springfield; isn't it?

Mr. MINOW. Yes, sir.

Mr. MACK. Therefore, your table of assignments is incorrect; is it not?

Mr. MINOW. That is correct.

Mr. MACK. As I understand further, without discussing the merits of this case, you have had a directive from the court to take a fresh start?

Mr. MINOW. That is right, with the authorization to maintain service there in St. Louis.

Mr. MACK. Yes; they permitted you to continue the service.

Mr. MINOW. That is right, sir. This proceeding has been going on, as you know, for years and years and years.

Mr. MACK. I am very familiar with that and well aware of it. I hate to admit that it has been going on for 13 years, but it has. And I presume that at this late date it cannot be helped.

Mr. Chairman, this channel 2 does fall in the same category as the other eight channels?

Mr. MINOW. Channel 2 was never on the air, as I understand it, in Springfield. In the other eight, there you have a station which is actually in operation rendering a service.

Mr. MACK. With the exception that the FCC has permitted channel 2 to operate on the air in St. Louis, they fall into identically the same category; do they not?

Mr. MINOW. I would say it is more analogous to the one in Peoria, where the channel was assigned, but the Commission deleted it and deintermixed it and moved it, but it never actually was on the air, that, I think, is a distinguishing characteristic.

Mr. MACK. It is subject at the present time to the same identical proceedings that the other channels are subject to?

Mr. MINOW. Yes, except you are not talking about removing an existing service from Springfield.

Mr. MACK. As far as the procedure is concerned, it is in exactly the same category?

Mr. MINOW. As far as the procedure is concerned, they are the same, they are both in rulemaking procedures to change the assignment, the procedures are the same.

Mr. MACK. Mr. Chairman, this morning Chairman Harris inquired—I was not present at the time, is the reason I am pursuing this at this point, I was called out of the hearing room for a few minutes—Chairman Harris inquired, as I understand it, as to whether the Commission, if given all channel receiver legislation, would be willing to postpone for perhaps several years any further action with respect to deintermixture. And I believe that you replied that in behalf of the entire Commission you would submit a written response to this question before the conclusion of these hearings.

Mr. MINOW. That is correct, sir, except I think it would be after the conclusion of the hearings. I believe your hearings will probably end at the end of this week, and I said, we would get a written response up here within a week or so after that.

Mr. MACK. Within a week after it?

Mr. MINOW. Yes, sir.

Mr. MACK. I presume that you could not make this determination prior to that time?

Mr. MINOW. Well, some of our commissioners are not here. I think this is a matter of such importance that I would like to have the views of all seven of us reflected in it, sir.

Mr. MACK. The point I want to make now is, I hoped that your comments on the proposed moratorium would include all of these stations in the same category.

Mr. MINOW. Well, we will, sir, except there may have to be differing views, I would anticipate, in different categories of cases, because some of these are in various stages of litigation and rulemaking, and so on. I pointed out earlier this morning that some of them may be situations where the facts will require a different policy. But we will take that into account in furnishing our written response.

Mr. MACK. It seems to me that it is quite unfortunate that the Commission selects to put channel 2 in a separate category simply because it was in competitive hearings at the time, and because of certain matters that developed, the case became quite complicated.

It seems to me that to have a separate test as to whether this station should be on the air is somewhat unfair.

Mr. MINOW. I wouldn't want to anticipate what the Commission's view on that will be, except to point out that we have another problem in Bakersfield, Calif., that is in another stage of proceeding, and this is the kind of thing that I think would require a detailed analysis before we could give you an intelligent answer.

Mr. MACK. Could I ask a hypothetical question?

Mr. MINOW. Yes, sir.

Mr. MACK. If there were some television channel or radiofrequency which had been assigned to a certain community, and over a course of 15 or 20 years the Federal Communications Commission failed to approve one of the applicants, do you feel that the Congress ought to determine who should get that radiofrequency?

Mr. MINOW. I don't know how the Congress would do it unless they wanted to have special legislation. I don't think you could do it under the act as presently written.

Mr. MACK. Well, is it not true that the Congress would be within its rights to pass special legislation to assign a radiofrequency?

Mr. MINOW. I think assigning a frequency to a community, certainly. But I understand your question to mean assigning it to a licensee.

Mr. MACK. Well, I would accept your reply, to the community, you do feel that the Congress would be within its rights?

Mr. MINOW. There is no question about that. All of our authority stems from the Congress.

Mr. MACK. Do you feel further that it would be in the public interest after that long period?

Mr. MINOW. Without knowing all the facts, I think I would have to say I think it would be not sound public policy for the Congress to get into this field on a special basis or community basis. I would emphasize, all the power that we exercise, Congressman Mack, is delegated to us by the Congress, so the authority of Congress to assign frequencies is where we start out.

Mr. MACK. What would you consider to be a reasonable time for the assignment of radiofrequencies to television channels?

Mr. MINOW. I am not familiar enough with the particular case in St. Louis and Springfield—that went on long before I arrived on the scene, and I don't know how long that has actually been going on. Certainly a lot of the problems that we labor under are caused by the provisions of the Administrative Procedure Act, appeals to the court, delays by parties—we have got cases that have been going on, I would be very frank to say, an unconscionable length of time.

Mr. MACK. With the chairman's permission I would like to introduce into the record a history of the situation which affects my area which clearly indicates that an application was made for a VHF channel in January of 1949, and during the freeze, I presume.

And competitive hearings were started in 1953, I believe it was, and it has been proceeding since that time. These people operate on the radio waves that belong to all of our people, and we have been denied the use of these facilities during that period.

As I said, I don't want to get into the merits of the case. But we had a considerable problem with regard to that on a previous occasion.

Mr. MINOW. Well, it is a problem, I would say, in terms of my own personal interest, that I have inherited that problem, I was not responsible for it.

Mr. MACK. I wasn't being critical of the action, I was asking what could be done in similar circumstances. We have other cases that have been dragging on through a 10- or 20-year period, and the applicants will have died, or lost their interest, or many things have happened.

Mr. MINOW. The only encouraging thing I can say, Congressman, is that we are doing better now than we have been. We are almost current on our docket, a hearing examiner is being assigned to a case on the date designated for hearing, and we are doing better than we have in a long time.

Mr. SPRINGER. Will the gentleman yield?

Mr. MACK. Yes.

Mr. SPRINGER. Mr. Chairman, this is one thing that is in doubt with respect to the *Sangamon Valley* case, as also with reference to channel 2 which has been assigned to Springfield.

Now, with the order from the Supreme Court—or was it the U.S. Court of Appeals?

Mr. MINOW. Court of appeals.

Mr. SPRINGER. The court of appeals, it is back with them—this is not clear to the people of Springfield or our area.

Are you back in the same position that you were in the beginning when that case was originally assigned to Springfield, with this hearing, or are you not?

Mr. MINOW. Could I have our General Counsel answer that?

Mr. SPRINGER. Yes.

Mr. PAGLIN. If I understand your question, Mr. Congressman, the Commission is presently under court direction reconsidering the rulemaking action which took place back in 1957, I guess. As a result of the long course of litigation, we are now at the stage where the Commission is reconsidering the basic reallocation action.

Mr. MACK. Let me follow that through.

You are not back in the same position at that time that you were when that case was assigned to Springfield, are you?

Mr. PAGLIN. No, if only by virtue of the fact that there is a station in operation in St. Louis on that channel.

Mr. MACK. Would you repeat that?

Mr. PAGLIN. I say, no, if only by virtue of the fact that there is a station in operation in St. Louis on that channel presently.

Mr. SPRINGER. Then you are presently in the position of making a decision, first of all, shall channel 2 be assigned to Springfield or to St. Louis, aren't you?

That is the first decision to be made, isn't it?

Mr. PAGLIN. To determine which is——

Mr. SPRINGER. That is right.

Now, if you make a decision that it is in St. Louis, then it is gone from Springfield, if you make a decision that it comes back to Springfield, then you are in the original position you were in the beginning when it was assigned to Springfield, is that right?

Mr. PAGLIN. In terms of the allocation proceeding; yes, sir.

Mr. SPRINGER. So you have got two decisions, first the rulemaking decision, and then second, when it gets back to Springfield, who gets it.

Mr. PAGLIN. There was a grant made on the Springfield UHF channel 2 with May, Inc., I think. They have since surrendered the channel. Before the Commission could go forward—there were, as you probably recall, some allegations of ex parte representations being made.

Mr. SPRINGER. On UHF or VHF?

Mr. PAGLIN. They were given a permit for the UHF, which was substituted for the original. So before the Commission could go forward they would have to resolve those matters as well.

Mr. SPRINGER. In addition to those other two problems that I have mentioned?

Mr. PAGLIN. Yes.

Mr. SPRINGER. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Mack?

Mr. MACK. I don't have a copy of the court order here, but it is my understanding that the court instructed the Commission to take a fresh start.

Mr. PAGLIN. On the allocations matters; yes, sir.

Mr. MACK. And the court cannot instruct you to hold new rulemaking proceedings on the matter of transferring channel 2 from Springfield to St. Louis, that was done on the motion of your Commission?

Mr. PAGLIN. No, our understanding is that that is exactly what the court directed us to do, to start the proceeding de novo.

Mr. MACK. They simply required you to start the proceeding with regard to the transfer?

Mr. PAGLIN. By transfer you mean the shift of the channel from one community to another, to start that afresh?

Mr. MACK. Yes, I am asking you that.

Mr. PAGLIN. That is so.

Mr. MACK. That is true?

Mr. PAGLIN. I say, yes.

Mr. MACK. And has the court since that time instructed you to hold further proceedings concerning the assignment of the channel after it is located in Springfield?

Mr. PAGLIN. They did.

Mr. MACK. Well, I wasn't quite familiar with it, and I appreciate the testimony to straighten that out.

Mr. PAGLIN. Very recently what happened after the Commission took the case back on the original remand and made a determination with respect to the allocation, it went back up to court, and the court remanded it again on the very ground that they held that the Commission should consider this matter on a de novo basis, that is, from the original. And this happened about 6 or 8 months ago.

Mr. SPRINGER. Would you yield, Mr. Mack?

Mr. MACK. Yes, I would be glad to.

Mr. SPRINGER. Let's see if we understand this as a lawyer, because I don't think you said the same thing to Mr. Mack, and Mr. Mack doesn't have the same understanding as I do.

You said de novo. Do you know what "de novo" means?

Mr. PAGLIN. I believe I do.

Mr. SPRINGER. It means starting anew.

Mr. PAGLIN. I believe that is correct.

Mr. SPRINGER. You can't start anew until it is back in Springfield.

Mr. PAGLIN. It is in Springfield presently as much as it was, but you must take into consideration that the court permitted us from the very time the litigation first came back to maintain the existing operation in St. Louis. There were contentions made to the court that this could not be because they had set the order aside, and arguments of that nature. However, the court again permitted us to maintain the existing service in St. Louis while this proceeding was being reconsidered.

Mr. SPRINGER. Just one further question.

Did you say to me a minute ago—I asked you this question— that the first decision that the Commission had to make was whether or not they were going to keep this station in St. Louis or return it to Springfield, and you said, yes, that is the first decision?

Mr. PAGLIN. That is correct.

Mr. SPRINGER. That isn't de novo, Mr. Counsel, when you try de novo you order it back and you try it over again on the same evidence.

Mr. PAGLIN. Perhaps I can reform my statement to this extent. When the court upset the Commission's original reallocation of this channel from Springfield to St. Louis, it in effect went back to Springfield.

However, the court at the same time gave us permission to maintain the existing operation in St. Louis while this litigation was going on.

Mr. SPRINGER. Now, are you going to make a decision as to whether or not it remains in St. Louis, or it is now in Springfield?

Mr. PAGLIN. If it is only a question of semantics, allow me to clear it up this way.

The decision is whether or not it shall remain in Springfield, or whether it shall be reallocated to St. Louis. That is the basic thing.

Now, if we are arguing about words, I defer to your use of the language.

Mr. SPRINGER. What you say now is, it is back in Springfield, and you are making the decision now as to whether or not you are going to transfer it to St. Louis?

Mr. PAGLIN. Yes. And that is the proposal in the deintermixture proceeding.

Mr. MACK. That is the reason I raised the question about your table of assignment, because there must be considerable confusion within the Commission if they are listing this station as being assigned to St. Louis.

Mr. MINOW. I think, Congressman Mack, it needs a footnote there explaining the status of this very complicated proceeding.

Mr. MACK. But the channel is still assigned to Springfield, Ill.

Mr. MINOW. Yes, sir.

Mr. MACK. I am not going to take much time on this general problem. I might state that while there have been cases appealed to the Supreme Court based on 307(b), we have never had a determination in that regard.

Mr. MINOW. You mean on a deintermixture?

Mr. MACK. Yes.

Mr. PAGLIN. Which case are you referring to?

Mr. MACK. Well, the *Sangamon Valley* case against *Sprinfield*, a petition for certiorari in that case, the appeal was based on 307(b).

Mr. PAGLIN. Sangamon Valley lost in the court of appeals on that particular point, and the Supreme Court, in sending it back, did not rule on that particular point.

Mr. MACK. But they granted certiorari on that point; did they not?

Mr. PAGLIN. No; they did not. It was on the ex parte representations, a statement made in the pleadings before the Solicitor General with respect to the things that had come out since the court of appeals had ruled on the matter.

Mr. MACK. Before they heard of the statement of the Solicitor General in——

Mr. PAGLIN. Not before, after.

Mr. MACK. That was not my understanding.

Mr. PAGLIN. The Supreme Court ruled on this after the statement made by the Solicitor General in the pleadings.

Mr. MACK. My original question was, has the Supreme Court ever decided a case on 307(b) with regard to deintermixture?

Mr. PAGLIN. Not in the television field to my present recollection.

Mr. MINOW. My understanding is that there are court of appeals rulings, but no Supreme Court ruling on that point.

Mr. PAGLIN. One other thing.

Insofar as there were petitions for certiorari by various parties in these allocations proceedings going back into 1954 or 1955, and the Supreme Court denied certiorari on these very arguments that were raised in several cases, you could say as a lawyer that the Supreme Court had turned these arguments down.

Mr. HEMPHILL. Will the gentleman yield to me right there?

Mr. MACK. Yes.

Mr. HEMPHILL. I don't understand certiorari to be that, I understand certiorari is where four or more justices think the question has not been decided. Am I correct in that, just as a country lawyer?

Mr. PAGLIN. On the substance of it it probably was not.

Mr. HEMPHILL. But I don't want that interpretation here on that particular point.

Mr. PAGLIN. I withdraw that.

Mr. MACK. There was a very interesting case decided by the court of appeals on July 13, *In the matter of Television Corporation of Michigan* v. *The Federal Communications Commission*, which involved the transferring of a transmitter. And that seemed to be very interesting with regard to their decision concerning the equitable distribution of the airwaves and the fact that 900 people were left without any television service at all, which seems to be a different view than the one General Counsel expressed.

I would like to proceed, though. I don't want to take too much time.

I would like to ask why the Commission does not consider the population test when selecting the areas, the communities to be deintermixed?

Mr. MINOW. I think we consider it indirectly, to the extent that we wouldn't, for example, propose deintermixing a very small community for the purpose of getting in multiple services, if you are talking about a community of 5,000 people. But the eight that were selected were all cities of substantial size so as to afford an opportunity for a multiplicity of services, to that extent I think we consider population.

Mr. MACK. In your plan to utilize VHF services you have so very small cities such as those with a population of 23,000 that are scheduled for a UHF channel.

Mr. MINOW. You mean on the table of allocations?

Mr. MACK. Yes.

Mr. MINOW. Yes.

Mr. MACK. I am specifically referring to Jacksonville, Ill.

Mr. MINOW. That table was done in 1962, looking toward trying to provide a fair and equitable distribution for the entire United States. And we have always hoped that any community would have a chance for local television service.

Mr. MACK. Well, in the light of your experience, do you think a community of 10,000 population could support a television station of any kind?

Mr. MINOW. We have some, I know, Congressman Mack, in the United States in very small communities. In Jacksonville, for example, the educators want 49, they want that right now, for an educational television station.

And this effort in 1952 was to provide a chance for a local service, commercial or educational, whatever it may be, in as many places as possible. There are many small communities, particularly in the West, which support television stations.

Mr. MACK. Well, is that based on the number of people that would receive the television signal?

Mr. MINOW. I think the number of people that would receive the signal certainly is a key part of the success of a station; yes, sir.

Mr. MACK. And would you think that a community of 10,000 could support a UHF television channel?

Mr. MINOW. It may not support a full-flledged local service, but there are all kinds of variations of this, there are semisatellite stations, we do have some stations throughout the United States that share time between educational and commercial use, there is a great flexibility.

But I would say in general that we don't have too many licensees, television licensees in communities of 10,000.

Mr. MACK. I noticed your chart, that is a very interesting chart, and I am disappointed that you didn't use it today.

Mr. MINOW. I did, it was very early in the morning. We would be glad to do it again.

Mr. MACK. I must say it would be fascinating to see the lights turned on. I want to raise the question about the 181 VHF channels that are not presently used.

Mr. MINOW. I think we could show you those on the map. You will find that something like 60 of them are either before us or before the courts, like the one that we have been talking about.

Mr. MACK. I might say that there are a few inaccuracies in your map. I had an opportunity to make a close inspection of it last night, and I note that you had a VHF television channel at East St. Louis. We would like very much to have one there, but unfortunately they have five on the St. Louis side of the river and none on the Illinois side.

Mr. MINOW. I think that is a matter of how close you can get the lights on that small space on the map. They are all bunched together. There are 181 that are not on the air, and as I say, about 60 of them are in the various stages of processing. The others that are not on the air you will find for the most part are in areas of sparse population.

Mr. MACK. You would say that you have about 120 that are not being used?

Mr. MINOW. I have it in the statement exactly, I think it is 120 or 121.

Mr. MACK. And those are all located—most of them are located in the western section of the country, sparsely settled areas.

Mr. MINOW. Right, with the exception of some VHF educational stations that have not gone on the air, with that exception.

Mr. MACK. Now, the reason that those VHF stations are not being used is because you don't have the concentration of population?

Mr. MINOW. That is correct, sir.

Mr. MACK. Now, aren't you trying to do exactly the same thing with your UHF deintermixture program in other areas of the country, inasmuch as the UHF has a more limited range?

Mr. MINOW. I think not, sir. I take the example in Illinois of Peoria, where, without UHF you couldn't have the public getting a choice of three services, it just wouldn't be there, it wouldn't be available.

Mr. MACK. I would like to discuss Peoria.

Mr. MINOW. All right.

Mr. MACK. This morning my colleague, Mr. Springer, raised some very interesting questions concerning what could happen or what might happen or what should happen, perhaps, with regard to some of the Indiana VHF stations that are overlapping this so-called VHF island in Illinois, especially Danville.

On the other side of the State we have Quincy, Ill. Although your map only shows one station there are actually two. One of the VHF channels is assigned to Hannibal, Mo., and it is also being operated in Quincy. So you have two stations operating out of Quincy.

From your statement it is indicated that Quincy is one area where you have two VHF stations, but you don't have channels available to assign a third.

Mr. MINOW. That is correct, sir.

Mr. MACK. So I assume on that basis that it might be logical to assume that if you proceeded with your deintermixture program that you might want to eliminate the Quincy market, which carries to Springfield—I understand in Jacksonville, only 30 miles from Springfield, the Quincy station is a preferred station.

So you might want to eliminate those stations in Quincy as part of the deintermixture, and then you would leave places like Macomb, Ill., a city of 12,000, without any television service of any kind.

Mr. MINOW. Certainly the thought has never even been proposed, I haven't heard a thing about it until now. It seems to me that this discussion shows why we don't think that deintermixture on a selected community basis is the long-term solution to the television problem of the United States.

If you start taking them community by community by community, then we will all have differences of opinion about this and that. We want a national long-term solution. That is why we think that the all-channel television receiver will be self-regulating and will provide an opportunity for the whole country to enjoy a multiplicity of television services, as the Commission foresaw in 1952, when it did this allocation table.

Mr. MACK. That is, the Commission has referred to islands, and I think that Mr. Springer was projecting into the future to determine the boundaries of those islands, whether or not the so-called islands would get bigger.

Mr. MINOW. In these particular communities, as I recall our discussion this morning, we pointed out that there were no substantial UHF conversions in those cities, none at all, as far as I know. So the possibility of deintermixture there is unlikely. But I would repeat, the point I want to emphasize is this, deintermixture on a selected community basis is not going to provide the United States with a national television policy. This is just to meet a local imbalance, to prevent a local monopoly, and to try to provide competitive services for the people in those areas.

Now, where the possibility exists, we would prefer that the Congress pass the all-channel television receiver, because then, looking down the road, looking down to 1970, we can see the day when there can be in this country enough television service to provide a multiplicity of service for everyone.

Mr. MACK. If you want to yield the floor, I would like to know more about your experience in the Peoria area.

You referred specifically to Peoria in your statement concerning your experience, and I would like to get that.

Mr. MINOW. Our experience there is that there are three UHF stations on the air, and the public has benefited from a choice of services, all of which are doing well, and are economically vital.

Mr. MACK. And there is an island, is there not, that you referred to?

Mr. MINOW. I don't think we did, sir. I don't think we used the term.

Mr. MACK. The Commission has not used that term?

Mr. MINOW. The Commission may have. I thought you were referring to my statement. In the past I think we have, yes, sir.

Mr. MACK. Have you abandoned that island concept?

Mr. MINOW. No. It is a device for isolating certain communities to provide equal competition. It is not a solution.

Mr. MACK. In the case of Peoria, you did have an area that you felt was properly deintermixed?

Mr. MINOW. Yes, in 1957.

Mr. MACK. Was it not true—when was that?

Mr. MINOW. In 1957.

Mr. MACK. Was channel 8 on the air at that time?

Mr. MINOW. The V was never on the air in Peoria.

Mr. MACK. Is it not a fact that one of the operators of the UHF—one of the UHF stations in Peoria lost a quarter of a million dollars while in a so-called deintermixed area?

Mr. MINOW. I am not aware of that. I would be glad to check on that. I know that now two of the three are reporting a profit.

Mr. MACK. Two of the three are very close to the break-even point, and are now presently reporting a slight profit?

Mr. MINOW. That is right.

Mr. MACK. So that even with your program to eliminate the longer service, better service, you still have a very difficult problem in a highly concentrated area, is that correct?

Mr. MINOW. I think not, Congressman Mack. I had a letter the other day from the editor of the Peoria newspaper telling me—I would be glad to supply it for the record—telling me that the UHF service there is perfectly satisfactory for the public.

Mr. MACK. As a matter of fact, I think that this newspaper owned one of the UHF stations prior to the time that he addressed the letter to you.

Mr. MINOW. I think that is correct. But he no longer has any interest.

Mr. MACK. But this individual did have at one time an interest in this matter?

Mr. MINOW. Yes, sir.

Mr. MACK. I have no other questions at this time.

The CHAIRMAN. Mr. Sibal?

Mr. SIBAL. Mr. Chairman, would you mind repeating again the criteria which the Commission used in determining which of these stations you would attempt to deintermix?

Mr. MINOW. The criteria where a community which had one V and only one V, one or more U's in operation, and a community where the citizens, or a substantial percentage of the citizens already owned sets capable of receiving UHF signals.

Mr. SIBAL. How did you determine the last criteria?

Mr. MINOW. There are research reports available and reports of actual viewing.

Mr. SIBAL. Did you give any weight at all to the job the VHF station was doing in terms of public service?

Mr. MINOW. No, sir.

Mr. SIBAL. None whatsoever?

Mr. MINOW. No.

Mr. SIBAL. So that if a VHF station was doing a topflight job, perhaps consisting of some of the ideas you have about television programing, you would still move to take away that station?

Mr. MINOW. We did not take program service into account at all.

Mr. SIBAL. Did you take into consideration the amount of investment in time and money and headaches with this station involved?

Mr. MINOW. No, sir.

Mr. SIBAL. You don't feel that that is something you should consider?

Mr. MINOW. We feel our concern should be with the public, not with the licensees.

Mr. SIBAL. You don't have any responsibility to the licensee?

Mr. MINOW. We have a responsibility to treat him fairly; but our main concern is that the public gets full service.

Mr. SIBAL. Do you feel that it is fair to treat the licensee who is doing a good job on the same basis as a licensee who might not be?

Mr. MINOW. We handle that problem at renewal time; if he is performing in the public interest, he is renewed; if he is not, he isn't.

Mr. SIBAL. But if, for example, channel 3 in Hartford is doing a good job, the attempt is still made to deintermix on the same basis as if the job were in Peoria?

Mr. MINOW. If he is doing a good job on a V he will do a good job on a U; the program service will not be affected by whether he is on a V or a U.

Mr. SIBAL. How much power is needed to provide similar coverage with UHF as provided by VHF?

Mr. MINOW. I will have Mr. Cox answer that.

Mr. COX. A fairly high powered UHF operation would be 1,000 kilowatts as compared to the maximum permissible for channel 3 at present of 100 kilowatts.

However, this increased power, as I understand it, not being an engineer, is reasonably possible through the use of certain tubes which step up the power of a normal transmitter.

Mr. SIBAL. Can you give me an estimate of what that would cost?

Mr. COX. I think the estimate is something on the order of $250,000 for a good, substantial UHF operation.

Mr. SIBAL. Now, how does that compare with the VHF?

Mr. COX. I think there have been some VHF stations built for more and some built for less. It depends in part, of course, on studio facilities. In the case of an existing station, those are already in being. The tower would already be in being. What would be involved here would be the purchase of a new transmitter.

Mr. SIBAL. About a quarter of a million dollars?

Mr. COX. I believe that is an acceptable figure.

Mr. SIBAL. Wouldn't more transmitters be needed?

Mr. COX. No; this station would use a single transmitter. It might fill in, if areas developed where they could not cover, and where they previously had been providing service, they might fill this in with translators. These, however, are unattended repeaters, relatively inexpensive, operating in the top UHF channel, and it might require a number of these to fill in particular pockets. But this would not be regarded as an additional transmitter for the station.

Mr. SIBAL. But it would amount to additional cost to the station, wouldn't it?

Mr. MINOW. Yes. But these are on the order of $6,000 or $7,000.

Mr. SIBAL. Do you consider that insignificant?

Mr. MINOW. No; but in terms of the efforts that are being made by the citizens themselves in certain remote communities to install these, maintain them, and operate them in order to get service, I think it is an acceptable operating cost for a station which desires to extend its coverage beyond that which is obtainable from its main transmitter.

Mr. SIBAL. Are you familiar—Mr. Chairman, any of these questions you want to answer, of course, you may—are you familiar with the various development of UHF programing and transmitting in Western Europe?

Mr. MINOW. I am not. Commissioner Craven is, but unfortunately he is not here today.

Mr. SIBAL. Will he be appearing before our committee again?

Mr. MINOW. I think not. But Commissioner Lee is also familiar with it, and he will be here tomorrow.

Mr. SIBAL. We won't pursue that further now. But I have looked into that to some degree, and the additional cost to provide a UHF facility which would meet the service, the standard of the VHF facilities, is very substantial, accordaing to the engineering experts over there. Also I might say that the development of VHF has been side by side with UHF. I know of no VHF stations which, in effect, have been removed so that UHF could move in. There has been this development of both systems simultaneously.

Mr. MINOW. That is what we hope will happen here.

Mr. SIBAL. If the all-channel receiver legislation passes?

Mr. MINOW. That is our purpose.

Mr. SIBAL. If we move it side by side, then, what is the need to deintermix?

Mr. MINOW. Well, we talked about it this morning. Our proposal here was independent of any deintermixture. And it is a long-range solution to the problem. We don't think the two are necessarily related. And we are going to supply to the committee a specific answer to the request of the chairman as to our views on the proposed deintermixture cases, in the light of the legislation.

Mr. SIBAL. This morning in response to a question that I think Mr. Springer put to you, but perhaps it was one of the other members, as to whether or not outdoor antenna were needed in UHF receivers, your answer was—I don't think it is totally responsive—you said, "Well, this set back here is using rabbit ears."

Isn't it a fact that UHF normally does require a roof aerial, so to speak?

Mr. MINOW. In many instances that is so. I think it depends on where you are. I do think that in somewhat more cases an outdoor antenna is necessary for a U than it is for a V.

Mr. SIBAL. And isn't it also true that in order to have effective reception that the receiving antenna should be aimed in the direction of the transmitter in UHF in order to avoid ghosts, and so forth?

Mr. MINOW. I think that is true of both the V and the U, but I think there is an element in the U to a greater extent than the V; yes.

Mr. SIBAL. The point I am making is that while it may be so that UHF can be developed to provide adequate service with boosters, and so forth, all along the line there are additional engineering problems which lead to additional costs; isn't that true?

Mr. MINOW. I think that that is true to a certain extent. It is also true, some of the engineers tell us, that there are some distinct advantages to the UH over the VHF.

Mr. SIBAL. In terms of manmade noise, and so forth?

Mr. MINOW. Manmade noise and cosmic noise and the elimination of airplane flutter, and so on; there are some advantages.

Mr. SIBAL. But this doesn't go into the cost much, does it?

Mr. MINOW. No; I think that is right, sir.

Mr. SIBAL. Now, in connection with the all-channel receiver suggestion, do I understand that you in general had cooperation of the industry, the manufacturing industry?

Mr. MINOW. Not all of them. There were some of them who—RCA, for example, which I think is the largest manufacturer of television sets, is in support of this legislation. Some of the others are opposed to it.

Mr. SIBAL. And in order for it to be done on a voluntary basis, it would be essential that the whole industry——

Mr. MINOW. We would love it if it could be done on a voluntary basis.

Mr. SIBAL. You have explored this possibility?

Mr. MINOW. Well, you have got a competitive problem. Congress explored it when Mr. Cox was counsel of the Senate committee, the Congress on the Senate side explored this very thoroughly with the manufacturers. You have got a problem of competitive disadvantages for the manufacturer who is willing to make an all-channel set and then finds it difficult to sell in competition with the cheaper VHF only set. Also you have a problem of possible antitrust violations if they all got together and agreed to make only the all-channel sets.

So this has been explored and it has been found to be unworkable.

We would love it if that were possible.

Mr. SIBAL. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Roberts?

Mr. ROBERTS. Mr. Chairman, I have been fascinated by the board, too. I must say that I am somewhat disappointed by some of the red lights. I would like to have them switched on, the VHF on the air.

Now, as I take it from your statement, each of the red lights represents an operating commercial or, I suppose I should say, educational stations?

Mr. MINOW. Correct, sir.

Mr. ROBERTS. Now, from where I was sitting—I took a close look at the map a minute ago——

Mr. MINOW. I would like to amend my answer. The blue ones were the educational stations.

Mr. ROBERTS. The red ones would be your commercial VHF stations now on the air?

Mr. MINOW. Right.

Mr. ROBERTS. Now, I went back and looked a minute ago, and I didn't see one for Montgomery, Ala.

Mr. MINOW. There should be one as close as the mapmaker could get it on.

Mr. ROBERTS. Well, there is one there that is intended for Selma, Ala., which is in the district which I have the honor to represent. And I didn't see one for Columbia, S.C.

Mr. MINOW. I am going to get another mapmaker.

Mr. ROBERTS. And I didn't see one for Erie, Pa., and I just want to know if we have already had it.

Mr. MINOW. No, sir. This map is designed to be the situation as it is.

Mr. ROBERTS. Then if it doesn't show Montgomery and Columbia and Erie the map isn't correct, is it?

Mr. MINOW. I can't understand that, because they were made by our administrative officer—he is not here—but these were not intended to delete any stations whatever.

Mr. ROBERTS. I am grateful for that statement.

The CHAIRMAN. I think it is in error. I notice you show, two in Little Rock, and there are three.

Mr. MINOW. I think one is allocated in the Little Rock case a little out of Little Rock.

The CHAIRMAN. It shows one in Hot Springs and two at Little Rock, you should show one at Hot Springs and three at Little Rock operating. But I mention that to show that there are a few errors in it.

Mr. MINOW. Another is the fact that some of these lights may not be operating. The light for Columbia is out, but the bulb is there.

Mr. ROBERTS. I am sure the gentleman from South Carolina would be glad to furnish the bulb.

Mr. HEMPHILL. I hope to be able to furnish some light.

Mr. ROBERTS. Now, in line with the congressional policy as enunciated in the Communications Act which you stated, to encourage the larger and more effective use of radio in the public interest, certainly we on this committee are in favor of that policy.

Mr. Chairman, in an area—and I don't refer to this simply because it is in my State, because there are others who are in the same boat—but in the particular station that would be deintermixed, WSFA–TV, it is my information that that would leave about 15,000 square miles without an effective signal. Of course, Montgomery being our State capital, it is of great concern to us that this Commission action might possibly take place.

Now, what in your opinion would be the situation as far as these particular consumers—I might say, to give them a more dignified term, these "constituents" of mine—would be in, as far as receiving an adequate service to replace that which they are going to use?

Mr. MINOW. Well, Congressman Roberts, we are not going to deintermix any community which will result in a significant loss of service to the public. We are in the process now—we haven't even read all the comments that have been filed; they would fill the room here. And this will be decided, if we go ahead in these cases—it will be decided on the record. A lot of these facts are in dispute.

Mr. ROBERTS. I know you can't speak for every member of the Commission, but you would feel that you had made a major step forward if you got the Congress to go alone with the all-channel receiver legislation, would you not?

Mr. MINOW. We would feel that we had made a major step forward in solving the allocations problem. On that I can speak for all seven of us.

Mr. ROBERTS. In the event—and I certainly hope that it doesn't take place—but in the event that, say, we deintermix X station: it is

now a V, and we replace it with a UHF station, I know this is not controlling in the Commission's consideration, but what are some of the economic losses that would be occasioned by a transfer to the new type signal UHF?

Mr. MINOW. You mean for the existing VHF licensees?

Mr. ROBERTS. Yes. Let's take an example of where you have an operating VHF station, and it has a tower which is located out on the outskirts of the city where properties may be very reasonable. Would it not be necessary, in order to send out the UHF signal—wouldn't the operator probably have to bring the tower inside, closer to the concentration of population?

Mr. MINOW. He might. The main expense would be in an increased power. And we estimate that this could run in the vicinity of a quarter of a million dollars for the increased power in the transmitter.

Mr. ROBERTS. For the increased power?

Mr. MINOW. Yes, sir.

Mr. ROBERTS. Now, of course at the same time that we are hitting on that side, we are also eliminating a large part of his consuming public on which his advertising rates depend, are we not?

Mr. MINOW. You are going to put a single VHF licensee on the same competitive basis with everybody else in that community.

Mr. ROBERTS. Actually, what you are doing is reducing the power of his signal to that of the UHF signal, are you not?

Mr. MINOW. Unless he goes up in power, you are reducing the kind of signal he transmits to the same as the UHF licensees; that is correct, sir.

Mr. ROBERTS. And then after we make these changes and they do not work out, what position are we in with reference to risk capital at that stage of the game?

Mr. MINOW. Well, I can only say that wherever we have tried it it has worked out. And more people have come in to go into the business; that has been our experience to date.

Mr. ROBERTS. Well, from my investigation the UHF has not been satisfactory in some areas of my State. I will not say it hasn't been satisfactory in others, but I will say that in some areas where it has been tried it certainly has not been a thriving success as far as my State is concerned.

Now, what effect do you think that the all-channel receivers would have on the matter of educational television, in which I am interested? And I would like to say that I want to compliment the Chairman and the Commission for its promotion of what I think is a very vital addition to our educational system.

Mr. MINOW. Thank you, sir.

And I might say that I regard the educational television as the most important thing here at stake with the all-channel receiver legislation. We will not have an educational television network in this country unless we make use of the UHF channels. The educators have told us that they need more than 900 UHF and VHF channels, but most of them are U's, in order to really create a nationwide educational television network.

Now, if the Congress passes the educational television legislation, and if we can use the UHF television channels, we will then have made it possible for a fourth service, a noncommercial educational

service, to operate for our schoolchildren and also for adult education in the evening. I think this is the most important thing at stake here.

Mr. ROBERTS. And you would say that it is more important really than the question of the deintermixture?

Mr. MINOW. In my opinion, we—on that I can speak for myself, but in my opinion there isn't any comparison between the two.

Mr. ROBERTS. Now, in the eight cities that have been more or less marked up for deintermixture, you say that most of those cases are in the breast of the Commission at the present time?

Mr. MINOW. Yes, sir. The reply comments are due, I believe, next week.

We have had a request, I think, to extend the time. So the reply comments are not even in yet.

Mr. ROBERTS. Do you know what the situation is with reference to the particular station that I mentioned, WSFA–TV?

Mr. MINOW. No; but they would be in the same status. I believe we will have to give an extension of time for the reply comments simply because the comments themselves were so extensive and voluminous.

Mr. ROBERTS. Now, at page 14, in the last paragraph you stated:

> We have considered the possibility of going to an all-UHF system. And, as you know, Commissioner Lee is a strong advocate of that course.
> However, the rest of the Commission is not prepared to adopt that solution.

Now, do you anticipate that the Commission will at some time be prepared to adopt that solution?

Mr. MINOW. Well, if the all-channel receiver is not in the hands of the public, if years from now we find that we don't have a competitive service for the country, then this is one solution that I am sure we have to consider. We are not prepared to adopt it now. I think there are many disadvantages in it; it would require a terrific dislocation, and we are not positive you could get the necessary coverage in the number of stations to provide service for the entire country. So at present this is not a very—in the opinion of six of us—a very satisfactory solution. But what will happen years ahead I can't predict with any great confidence.

Mr. ROBERTS. I notice that in the attachment to your statement you have listed several cities and towns in my native State which have been—in the table of allocations, the table of assignments—designated for UHF stations.

Have any studies been made by the Commission as to whether or not these stations would be economically feasible in these locations, or in similar locations?

Mr. MINOW. Our economist is here.

He tells me that we haven't done any formal economic studies. The biggest problem, of course, is that most of these communities are served by a signal coming in from somewhere else, a VHF signal usually from a larger community. I do notice on here, Jasper, for example, I notice that we have recently received an application for a UHF channel there. The educators are interested in a number of these others. So we do find a demand for them, although it is not extensive. The biggest problem is that there are no receivers

in the hands of the public to receive the signal even if a fellow went on the air.

Mr. ROBERTS. Now, do you anticipate that the changeover, that is, the all-channel receiver legislation, if approved by Congress, would entail a great outlay on the part of the manufacturing industry? Do you have any studies along that line?

Mr. MINOW. We have talked to the manufacturers a good deal about this. I don't think it would require an inordinate expense. I do think there would be further research done to improve the sets and get better sets. And I think that, of course, would be very much in the public interest.

Now, manufacturers, some of them particularly, are making all-channel sets right now.

Mr. ROBERTS. I believe in your recent hearings some of the manufacturers testified in favor of this type.

Mr. MINOW. Yes, sir. RCA, which is the largest manufacturer, submitted a letter to the Senate committee in support of the bill. The EIA, the Electronics Industry Association, is opposed to the bill. Several other manufacturers are for it.

Mr. ROBERTS. And I believe you have already stated that you would not want the power to set up the mechanical standards for the receivers, what you want is a policy.

Mr. MINOW. That is right. And all we are interested in is strictly performance characteristics having to do with 82-channel receivers, that is all; we are not interested in anything else.

Mr. ROBERTS. What is the situation with reference to types of sets that are now being manufactured, which is the more popular set, the portable set, or the console which usually requires or provides for an outside aerial?

Mr. MINOW. I think portables are taking an increasing share of the sales.

Mr. ROBERTS. There, again, you would have some problem with your UHF because of the fact that your portables ordinarily have dog-eared type antenna?

Mr. MINOW. No, there are portable all-channel sets manufactured, and they can be attached to an outdoor antenna if necessary.

The CHAIRMAN. Congressman Younger?

Mr. YOUNGER. Thank you, Mr. Chairman.

I do want to compliment the Chairman, Mr. Minow, on a very fine and conclusive statement.

I am a little concerned about the manufacturing situation. I understood that there was at least a preliminary agreement among manufacturers that they were not going to object to this type of legislation.

Mr. MINOW. I am not aware of that, Congressman Younger. As I mentioned, some of them are for it, and some of them are against it. I think all recognize, even those who oppose the bill, that we have to use the UHF channels in order to provide a nationwide service. I think they all recognize that.

Indeed, some manufacturers have advocated an all-UHF system.

Mr. YOUNGER. Under what section of the law would you say that we have the right to tell the manufacturers that they can't manufacture anything except an all-channel receiver in interstate commerce?

Mr. MINOW. We think you have this authority under the interstate commerce clause of the Constitution. And we have submitted a legal opinion about this for the record.

We think there are ample precedents, and cases in the field sustain the authority of Congress in this regard.

Mr. YOUNGER. And you think you have authority under your instructions to promote television?

Mr. MINOW. Yes.

Well, that is under our statute. But we recognize that the nature of this medium as an instrumentality of commerce and as a scarce resource justifies congressional action with respect to receivers.

Mr. YOUNGER. What would happen to your master antenna on an apartment house?

Mr. MINOW. I would say in most cases there would be no change. There may be certain instances where UHF antennas or modification antennas would have to be added.

Mr. YOUNGER. Right here in Washington practically all the master antennas on the apartments are capable of receiving only the V station. Will they have to be changed in order to receive the U stations?

Mr. MINOW. I am told that in some instances here channel 26 has been received without a change in the antenna. But I think in others it may be preferable. You would have to take a specific location. And I would say it is preferable in most cases to have some antenna adjustment.

Mr. YOUNGER. That is all, Mr. Chairman.

Mr. MINOW. May I add this, I want to emphasize that if the Congress passes this law that does not mean that the manufacturers would be required to start making these sets tomorrow. We would then undertake a rulemaking proceeding, and we would take into account all kinds of problems of inventories, production schedules, and everything else, and invite the comments and the views of the manufacturing industry, and work out a schedule here which would have a minimum of difficulty for all concerned. It might be—it certainly would be a year or more before the switch to making all-channel sets was accomplished.

Mr. YOUNGER. I was thinking, if you had some large manufacturer who objected to this and went into court to test the constitutionality of it, you might tie the legislation up for as long as 2 years or maybe longer?

Mr. MINOW. Right, that could happen, certainly.

Mr. YOUNGER. That is why I raised that point, because if it is going to pass I would like to see the manufacturers acquiesce in it.

Are we going to have any manufacturer hearings, Mr. Chairman? Are they scheduled?

The CHAIRMAN. They have been—of course they are perfectly at liberty to come and testify if they desire. We do not require people to testify.

Mr. YOUNGER. Have they been invited?

The CHAIRMAN. Yes, they have had a public invitation. We don't send personal invitations to people. But I will say that some of the manufacturers have expressed their interest in it either by personal appearance, or by filing a statement.

Mr. YOUNGER. Thank you.

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The CHAIRMAN. Mr. Jarman?

Mr. JARMAN. Mr. Chairman, in a community where the Commission has decided on a deintermix policy, I am particularly interested in hearing a few comments on the transition period that would be involved. Do I understand that under the proposal that every V licensee would be permitted to apply for a station in the same city on the U channel?

Mr. MINOW. That is correct, sir

Mr. JARMAN. So that during that transition period, then, would it follow that there would then be a system of dual operation of U and V broadcasting?

Mr. MINOW. That is right, for a limited time. And the best example we have of that recently is the one in Fresno, Calif., where that is exactly what happened.

Mr. JARMAN. Would it not follow that in a dual operation of that sort that in both the V and the U programing, as a practical matter from an economy standpoint, would they not have to send out the same programs on the U and the V?

Mr. MINOW. They would duplicate the same program service. That is what they did in Fresno.

This also gives you a chance to test, you see, the quality of the coverage and the reception.

Mr. JARMAN. In running the U and the V, with the licensee changing to U broadcast transmission, would he be able to do that on the same equipment, or would he have to change equipment?

Mr. MINOW. He uses the same tower, but he normally needs another transmitter.

Mr. JARMAN. What kind of added expense would that kind of operation entail?

Mr. MINOW. In the range—I would say a good one, talking about a good one, in the range of about a quarter of a million dollars. In our UHF test in New York it cost about a quarter of a million dollars for the equipment there.

Mr. JARMAN. I am concerned in my own mind about what good would result in my own State from the overall program that is being suggested and requested. We have V stations in Oklahoma City and Tulsa and several other cities in the State.

I don't believe that we have any U station except the one for educational purposes in Oklahoma City. The thing that I can't visualize in my own mind is what this proposal would do for the people of Oklahoma, how it would develop television in Oklahoma beyond what is being done now. Why wouldn't it result in a great many people in my own State not being within reception distance of programing that would follow under the U program.

Mr. MINOW. The educators in Oklahoma alone want an additional 15 U's.

Now, if you had—let's talk about educational television only for a moment—if you had the sets, then, in the hands of the public, and the educators go ahead, as I think they will, you would have a chance for an alternative educational service on those 15 stations. In addition to that, with the sets available, we believe that this fast-growing industry will encourage other people to apply for UHF commercial channels and bring in alternative services for the public.

Oklahoma has a number of U's assigned to it. I don't know if there are any on the air there or not, just the educational ones. The other possibility, of course, is that the prospects of building independent program service for smaller audiences or audiences who want something else will exist where it does not exist now. In other words, as it is now, Oklahoma cannot receive any more service than it has now. There is a V in Elk City which is not on the air.

Now, the other point I want to make is, when you buy a television set now, which is a VHF television set, it has space on it for 12 channels. But that doesn't mean that everybody buys one that can receive 12 signals. What we are trying to do here is make possible a multiplicity of service, and you can't do that unless you have a greater choice built into the set.

Mr. JARMAN. A good many of the contacts that I have with the television industry in my own State are convinced that if this policy is adopted and put into effect the small- and medium-sized communities in our State would suffer.

Mr. MINOW. We are not proposing any change in Oklahoma that I am aware of, except to drop in a V, to move one from Enid, Okla. But there is no proposed intermixture to move UHF in Oklahoma.

Mr. JARMAN. I was going to ask about whether a definite statement of policy as to Oklahoma has been made.

Mr. MINOW. No, the only thing we have done is propose this action in these eight cities, and to add eight V's in eight other cities. But we have not proposed anything across the board on a State-by-State basis. And there is nothing pending whatever in Oklahoma.

Mr. JARMAN. I will shift from Oklahoma just to ask for a general comment from you on one proposition that has been put to me by a number of people. Based on the Commission's starting procedures to deintermix in the eight communities, and also the announcement that it is contemplated that additional deintermixture procedures will be initiated in further markets at a later time—all of which is set forth in the July 27, 1961, statement—I heard frequently the conclusion that the FCC proposes to shift all or a substantial part of television broadcasting in the United States from existing V channels to U channels.

In your own statement today you have said:

> We wish to reiterate our firm conviction that the public interest requires the use of all 82 channels allocated for television.

Just for the record, because of conclusions on the part of a number of people with whom I have conferred as to what is the long-range intent of the FCC, I would be interested in your response to their own contention.

Mr. MINOW. Right.

Our long-rang intention is to use all of the 82 channels, the V's and the U's. That is why we want this all-channel receiver legislation. One Commissioner feels we should have an all UHF system. The other six of us do not. And I have tried to make that clear.

But apparently we haven't communicated it very well.

Mr. JARMAN. I think that is all.

Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Thomson?

Mr. THOMSON. Mr. Chairman, I want to join with the other members who have commended Chairman Minow for his very thorough and forthright statement of position.

But I must say, Mr. Chairman, that while I am somewhat encouraged by what you are telling us, I know that there are many people in my area that are very much dismayed by what they think you are doing to us. And I will have to join my colleagues here in observing that the statements you make are construed in a different light or we get different meanings from them, depending on our point of vantage. And I have a letter on that subject which I think will be a good example. It comes from Madison, Wis.

Now, I do not represent the city of Madison. But it reads as follows: The letter is addressed to me, dated February 25.

I snapped on the idiot box this bright Sunday morning, and what should appear but the vulpine visage of Senator Proxmire. Since the program was coming to a close I waited for the next one. The next one was Soapy Williams. Visibly shaken, I snapped over to channel 3, which you were defending a week or two ago. Channel 3 was featuring Senator Humphrey. From there I went to 27, which channel was featuring Secretary Freeman. I now understand Chairman Minow's reference to TV's vast wasteland. I tell you, Congressman, it is enough to make a man resort to stimulants.

Mr. MINOW. That will teach them to watch television on Sunday morning.

Mr. THOMSON. There you go. You find some people that agree with you.

Now, the Madison area is an intermixed area, the U's came in first, and presently there are four stations, channel 3, 15, 21, which is an educational TV, and 33. And the sets, incidentally, that I brought with me to Washington are all-channel sets. It never occurred to me there were anything else. My constituency begins generally 30 miles west of Madison and from there to the Mississippi River, where there are great problems of distance and geography. It is an unglaciated area where the bluffs are 500 feet high, and the valleys are deep, and frequently narrow. And in much of that area the only signal that can be received is the VHF signal, channel 3. But here is an intermixed area, but it is the V area which is now subject to one of your proposed programs for deintermixture. And I think that this is about the eighth time that deintermixture has been suggested for this particular area.

Now, is that about correct?

Mr. MINOW. I believe it is the third. I was—there may have been petitions filed to deintermix, but I think the Commission has proposed it twice.

This is the third time, including one proposal by a private party—in other words, there have been two proposals by the Commission, one by a private party—that the matter has been before the Commission.

Mr. THOMSON. Now, would your Commission make available to this committee copies of its November 1955 decision generally rejecting the concept of selective deintermixture?

Mr. MINOW. Yes, sir.

Mr. THOMSON. And the two 1957 decisions denying Madison deintermixture?

Mr. MINOW. Yes, we would be glad to supply that.

(The information requested may be found in the files of the committee.)

Mr. THOMSON. Now, does the FCC feel that there is any desirability or any public interest in administrative finality on which the public and the industry and the interested parties can reasonably rely?

Mr. MINOW. Yes, sir, we do.

Mr. THOMSON. And at what point does that arise?

Mr. MINOW. Well, in this problem, with constantly changing facts, and changing circumstances, I think it is very difficult to say when it finally arises.

Mr. THOMSON. Have there been any new facts and circumstances in the Madison proceeding since the last decision of your Commission?

Mr. MINOW. This is what we are trying to find out in the present proceeding.

My General Counsel tells me we are getting into the specifics of the case.

Mr. THOMSON. He has been very generous, you might say, in his correspondence through you.

Mr. MINOW. I must say that I don't understand all the law here myself.

Mr. THOMSON. You are driving me to the books.

Now, aren't your positions here today a little inconsistent with your actions?

You say you want to get an all-channel receiver, and you have got that in some areas, including Madison. But still you persist in these deintermixture proceedings.

Mr. MINOW. I don't think we have an all-channel receiver situation fully in that area. This is another—this, again, gets into one of the facts at issue.

But outside of Dane County, I think there is a problem of set compatibility. Certainly we know this. Certainly you don't have 100 percent conversion.

Mr. THOMSON. Well, it is true, is it not, that the all-channel receiver will only pick up a UHF signal when it is available in the area?

Mr. MINOW. Correct, sir.

Mr. THOMSON. Has your Commission given any study as to the number of people in the outlying areas of these eight cities affected by deintermixture?

Mr. MINOW. This is one of the key issues, one of the prime issues under consideration in all these comments.

Mr. THOMSON. Now, beside my home community of Richland Center, which is 55 miles from Madison, there is a city of Baraboo, which is roughly 35 miles, but it west of the Baraboo Bluffs. And the people there tell me they can't get UHF, but only VHF.

Mr. MINOW. Here, again, is one of the key factors that will be decisive for us if we proceed; namely, will there be any significant loss of service to the public? If so, then we are not going to deintermix an area.

Mr. THOMSON. In these studies does your Commission make an actual on-the-ground investigation to determine whether your engineering studies are in fact correct so far as being able to receive certain television signals?

Mr. MINOW. To a great extent there, I think, we rely very heavily on what the parties' engineers submit, and on available research data.

We do not normally send people out there, we don't have the staff to send the people out there to conduct measurements and so on ourselves.

Mr. THOMSON. Now, I think you said that when you made these allocations, or when the Commission made them, there was no study, economic study that went along with the location of these allocations.

Mr. MINOW. In 1952, you mean?

Mr. THOMSON. Or any time since then.

Mr. MINOW. I would like to have Commissioner Hyde answer that, since he was at the Commission at the time.

Mr. HYDE. In connection with the allocation that was announced in 1952——

Mr. THOMSON. Commissioner, might I interrupt to ask if——

Mr. HYDE. That is the outdated version of this.

Mr. THOMSON. Is this the recent version of it, or the original version which you have submitted?

Mr. HYDE. I understand the document before us to be the current version, it has certain additions that have been made since the allocation was released in 1952. There have been a number of changes, additional reservations for education, and some changes in locations where the station assignments were made. I was about to say that when we were making our original allocation we did undertake to get economic information as to the probable requirements of the various communities. We followed pretty much the amount of interest in broadcasting as indicated by AM assignments. We, of course, had a notice out inviting interested parties to submit information, and there was discussion of economic factors in connection with the final report.

But it did not undertake to say that a station would succeed at any place where we indicated a station assignment.

Mr. THOMSON. Do you have any factual information now in the Commission as to whether or not any of these could be economically justified?

Mr. MINOW. We have information as to the earnings of existing stations and stations in communities of comparable size. But we do not make economic forecasts of how a station will do.

Mr. THOMSON. When these were assigned, were they assigned generally by taking a tape measure and running it to find the distance between communities?

Mr. MINOW. No, I think fundamentally they were designed to provide nationwide coverage, and there were a series of priorities in the criteria. And I would be glad to submit that for the record. It was called the sixth order and report of 1952. We tried to provide insofar as we could at least three services in the large, densely populated areas, we tried to provide at least one local service so far as we could. Those are all set out. But we do not make an economic forecast as to how a station will do.

(The information requested may be found in the files of the committee.)

Mr. THOMSON. Can the Commission tell me how many of those UHF allocations are in cities of 20,000 people or less?

Mr. MINOW. We could supply that to you for the record.

Mr. THOMSON. Could you tell us the same for 10,000 or less?

Mr. MINOW. Yes, sir.

Mr. THOMSON. And the same for 5,000 or less?

Mr. MINOW. Yes, sir.

Mr. THOMSON. Do you really feel that in a station of 5,000 or less any TV can operate?

Mr. MINOW. Well, I think all our function is to try to provide the channels for private enterprise and for the educators. If they want to take them up and use them, that is going to be up to them. We don't decide in advance what they are going to do.

Mr. THOMSON. Now, has the FCC made any study to determine how many of these unused allocations are in major metropolitan centers which already have three or more VHF stations?

Mr. MINOW. We know that many of these communities are overshadowed; that means they are getting a signal in from somewhere else; we know that.

Mr. THOMSON. But you can't tell us exactly how many of those are paper allocations?

Mr. MINOW. I hadn't heard that term before.

Mr. COX. They all started out as paper allocations.

Mr. THOMSON. Mr. Chairman, you know we are studying pinball machines in another area of the law. And I want to say to you that those pinball people would be envious of all the lights that flash around here. The only thing that you don't have are the bells ringing. But I am just wondering how many of these lights that are coming on there are so uncertain as to the location of a station that they might be a fraud on this committee when you turn those lights on.

Mr. MINOW. Well, all we are showing you with the lights is, what is possible, what is available. Whether all the lights will go on I don't know. I know that there is certainly, in the educational side, an existing demand for over 900 channels; I know that. In 1945 we had less than 1,000 radio stations in the country, and they didn't think they could expand it, and now they have it for 3,800.

Mr. THOMSON. Could you explain for the committee the number of these small communities that are overlapped by multiple signals?

Mr. MINOW. Yes, sir, except that I couldn't say the extent to which in a specific community they were overlapped, but we will supply that as best we can.

Mr. THOMSON. Has the Commission made any study to determine how many of these unused UHF allocations are not being used for economic reasons?

Mr. MINOW. I don't think we have done that in an economic way; no, sir.

Mr. THOMSON. And I don't suppose you could tell me what the Commission proposes to do to help people that live in Richland Center and Baraboo or similarly situated communities that suffer from geographic conformations and have little or no choice of signals? I suppose that would be getting into——

Mr. MINOW. I think that would get us into the merits of that particular case that is pending before us. And I must say that I think that this is as unrealistic as you do; I mean the procedural rules.

Mr. THOMSON. Mr. Chairman, I don't think that is quite a fair statement of the fact. You are beginning to think that?

Mr. MINOW. No; I am trying to follow what the court has told us.

Mr. THOMSON. I think that is all, Mr. Chairman.

The CHAIRMAN. Mr. Hemphill?

Mr. HEMPHILL. Thank you, Mr. Chairman.

I noticed on page 14 of your prepared statement you said—

> The Commission strongly believes that the all-channel receiver legislation shall not be tied to the question of deintermixture.

Is that a statement of policy on the part of the Commission?

Mr. MINOW. Yes, sir.

Mr. HEMPHILL. It is not a statement of divide and conquer, is it?

Mr. MINOW. I am not sure I understand you, sir.

Mr. HEMPHILL. Well, it occurs to me that you are sponsoring, here, 8,031, that you said is the most important legislative effort and ambition of your Comission this year.

Mr. MINOW. That is correct, or which has been since before I came to the Commission.

Mr. HEMPHILL. And that legislation contemplates, in itself, intermixture, doesn't it?

Mr. MINOW. Yes, sir.

Mr. HEMPHILL. All right.

Now, you are here sponsoring legislation contemplating intermixture, and at the same time you are saying that when we are considering legislation which you say will affect intermixtures because you get the VHF and the UHF, at the same time you say we want a divorce from deintermixture; is that right?

Mr. MINOW. That is right.

Mr. HEMPHILL. And, then, to follow you up, you also say that the FCC has three proposals here, intermixture, regional deintermixture, or all UHF. You say that in your statement here, don't you, in effect?

Mr. MINOW. Those are alternative proposals that we have contemplated as possibilities.

Mr. HEMPHILL. That is correct. And you also say in your alternative proposals that you are not sure what intermixture, regional deintermixture, or all-channel receivers is the answer.

Mr. MINOW. That is the purpose, that is the purpose of that exploratory proceeding.

Mr. HEMPHILL. And you make the statement, as I understand you—you told Mr. Sibal, who sits on the end over there—that the public consideration was your first consideration.

Mr. MINOW. Correct, sir.

Mr. HEMPHELL. But you did not tell the committee, as I understand it, that the public has made any demand for the deintermixtures which your Commission is now contemplating.

Mr. MINOW. I don't think the public is really aware of what the considerations are, sir.

Mr. HEMPHILL. Well, I don't think the Commission is aware of the fact that the Congressmen represent the public.

Mr. MINOW. We are very much aware of that.

Mr. HEMPHILL. And we have advised by letter, by speech, by every known means of communication given to the U.S. Congressmen, the fact that in these areas where you are trying to deintermix—and I speak of Columbia, S.C.—you are doing my people as great a dis-

service as your Commission can possibly do in even proposing deintermixture when you say you do not know whether it is the answer or not.

Mr. MINOW. How else can we do this under the Administrative Procedures Act?

Mr. HEMPHILL. As a matter of fact, you made a statement to Mr. Thomson that you would not contemplate deintermixture where it would affect a loss of service.

Mr. MINOW. Exactly. And that is what we are trying to find out.

Mr. HEMPHILL. I want to inform you that if you take away VHF from Columbia, S.C., channel 10—the Commission has denied an additional VHF channel in the past, with which I was not connected in any way, since I wasn't a Congressman—in the past you have denied an additional VHF, and you propose to take this station from Columbia, S.C., and put it in Charlotte, which already has two VHF stations; you deprive 943,000 people of that particular service, which is a loss to the public, if your Commission considers the public——

Mr. MINOW. Congressman Hemphill, that is an issue that is pending before us on a record; we have not decided it; not even all the comments are in. We have not decided it. I have tried to make that clear.

Mr. HEMPHILL. Whether you have decided it or not, I want it clear today that I speak for the people of our State.

Mr. MINOW. I can only tell you that our General Counsel tells us that it is improper for us to entertain representations about a pending case.

Mr. HEMPHILL. Who tells you that?

Mr. MINOW. Our General Counsel. I have to follow his advice.

Mr. HEMPHILL. I am a Member of Congress, as a regulatory agency it is your business to listen to Members of Congress.

Mr. MINOW. You can file comments in any proceeding, Members of Congress can do that.

Mr. HEMPHILL. It is my opinion that so long as we are open and aboveboard that the Members of Congress have a right to speak.

Mr. MINOW. We respect that, but the courts have told us otherwise. It is my intention to follow the law.

Mr. HEMPHILL. But your agency is a creature of the Congress and not the courts, if I recollect the constitution of the regulatory agency which we call the FCC.

Mr. MINOW. That is correct. But in our case the court is the one that gives the last word.

Mr. HEMPHILL. And here you are trying to take the only station which we have which will reach people in my particular distance, the only South Carolina station that we can listen to, take it across the State line and put it in on another State, not a State capitol, and the people are absolutely cut off from the service because, as we said awhile ago, they can't get the Columbia UHF station.

Mr. MINOW. Congressman Hemphill, we are not proposing it, but I can't comment on it while the case is pending before us.

Mr. HEMPHILL. The reason I comment on it is because I think it is our duty.

Mr. MINOW. I respect that, but I am telling you my duty under the law.

Mr. HEMPHILL. Let's go to Fresno, Calif., which you have used as an example.

The Fresno area, if I recollect my geography, it is practically treeless, there is no geographic variations in altitude of many great consequence, and therefore you have the ideal situation for maximum UHF signal, maximum distance with maximum clarity.

Mr. MINOW. I think that is right, sir.

Mr. HEMPHILL. And do you think it is right to take the Fresno situation where you have got the optimum condition and judge the rest of the country where the geographic conditions and the contours that nature has provided, as Governor Thomson has said, make it very difficult?

Mr. MINOW. We haven't judged the rest of the country yet. Fresno is one example. Wilkes-Barre is another. Peoria is another. But we have not reached a conclusion in these other cases.

Springfield, Mass., is another.

Mr. HEMPHILL. But what are you doing to the public——

Mr. MINOW. We have done nothing so far.

Mr. HEMPHILL. If deintermixture is carried out which you propose in these areas in which I am so vitally concerned, if deintermixture is effected, you have two factors. One is the fact that the advertisers of the Nation are only going to pay for that service which they think reaches the market, which will in turn pay for the advertising along with the purchase of the products. Now, have you considered the fact that the advertisers of the country are not going to support economically the UHF stations which do not provide the signal?

Mr. MINOW. We can only tell you that they do now in many places in the country with UHF stations.

Mr. HEMPHILL. In many places in the country the UHF stations are folding up, and yesterday we had a Member of Congress who ran a UHF station at one time who told us his difficulties.

Mr. MINOW. I think there are acknowledged difficulties, that is correct, sir.

Mr. HEMPHILL. So we must recognize that economically the UHF stations, if they were so economically feasible, today you wouldn't have 1,441 vacant places.

Mr. MINOW. Well, one of the principal things that has made them so hard to operate is the lack of sets in the hands of the public.

Mr. HEMPHILL. Yes. And one of the things that has made them so hard to get into operation is the fact that their signal really won't go out far, too.

Mr. MINOW. That is correct.

Mr. HEMPHILL. And it is an ineffective signal. And unless you have a 2,200-foot antenna or something like that, and a maximum power, you can't really reach out as this dream that you people have, seeks to effect.

Mr. MINOW. I think that the experience of some UHF operators would contradict that.

Mr. HEMPHILL. The experience of some. But you told Governor Thomson that all you are speaking of when you are lighting up the lights is a possibility.

Mr. MINOW. That is right. We are maintaining, or trying to maintain a free enterprise broadcasting system, if people want to have the

opportunity to try, we think they should have the chance, if they don't they won't, but they should have a chance to go into this.

Mr. HEMPHILL. Do you think the public at Columbia, S.C., and in my area should be the victim of experimentation?

Mr. MINOW. This is no experimentation, and, again, I am sorry, but I can't discuss any particular community.

The CHAIRMAN. The Chair is going to have to hold, Mr. Hemphill, that to get any comment on the pending proceeding would be inconsistent with what general procedure is. And Mr. Minow has tried to explain that he cannot comment on it, and I think we all know what the situation is, and we know how——

Mr. HEMPHILL. I won't pursue it, Mr. Chairman.

Mr. MINOW. I regret it, Congressman Hemphill, but I am following what I understand the law to be.

Mr. HEMPHILL. I wasn't trying to get your answer to this particular problem, I just hope the Board hasn't given me the answer. But I cannot see how 8031, which you say proposes intermixture, or has a concept of intermixture, certainly, could be in any disagreement with the idea of us setting forth a congressional policy on further deintermixture until you do know not only whether or not you are successful in whatever you are doing in New York but whether or not the deintermixture generally in those areas in which you may seek to deintermix now in the future will deprive the public of some service. And I think that is very vital in this particular——

Mr. MINOW. As I said this morning, we would welcome, I mean it, we would welcome and eagerly seek congressional guidance in this overall policy matter.

We recognize fully that the all-channel set is a solution to the problem long term, we thing it is, whereas deintermixture is an attempt to take one place here and meet a particular problem, it is not a national long-range solution, we recognize that fully.

Mr. HEMPHILL. Suppose—not taking any particular station, but support you deintermix and make a mistake. The public pays, right?

Mr. MINOW. If we did—I do not think we have ever done it to date, sir. I think that is a pretty good indication of the care with which we proceed.

Mr. HEMPHILL. Well, I do not have any knowledge of that. I appreciate your confidence in yourself.

Mr. MINOW. I have confidence in the Commission, sir. I have only been there a year. But the Commission——

Mr. HEMPHILL. If the Commission should make a mistake, am I correct in assuming that the public would be the sufferer, leaving aside the investor—but the public would be the sufferer.

Mr. MINOW. If the mistake were made with regard to the loss of service, that is correct. But I repeat to you, we have not done it to date.

Mr. HEMPHILL. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Kornegay.

Mr. KORNEGAY. Thank you, Mr. Chairman.

Mr. MINOW. Mr. Chairman, I would like to commend you for a very fine statement and for your presentation of the Commission's position in connection with this matter.

I am Mr. Hemphill's neighbor to the north. My district has two of the UHF stations in the State. As I understand, there is no pro-

posal or plan to deintermix any part of it, for which I am eternally grateful.

Now, taking my State of North Carolina—and I think we have about nine U's in operation, one of which is an educational station, two others are contemplated—I am not going to ask you about those. But one of them is in my area, and is the subject of a hassle now going on, as I understand it. But in those that are presently operating, if they were converted tomorrow to VHF's, would not that, in effect, cut down the coverage at least 25 percent?

Mr. MINOW. I think—I want to go over that again. You say converted from U's to V's?

Mr. KORNEGAY. I am sorry. I had it reversed. If the V's that we have now were converted to U's would not that result in a substantial decrease in coverage?

Mr. MINOW. Yes, sir.

Mr. KORNEGAY. Up to at least 25 percent?

Mr. MINOW. I do not know exactly 25 percent, but it would be a substantial decrease; yes, sir.

Mr. KORNEGAY. And, of course, there would be no assurance that anybody would step in and take over the other available new stations, to take up the slack that would be created by the change.

Mr. MINOW. No—except if we ever undertook such a course, one of the principal guiding considerations would be whether we were depriving anyone of service. So the likelihood of our doing that, I would say, would be very, very nil.

Mr. KORNEGAY. Well, these eight areas, as I understand it, that are now in the process or being suggested that they be deintermixed, it is for the purpose of running tests to determine how it works. Is that not true?

Mr. MINOW. Well, first what we are doing now in those eight cases is finding out what the facts are. The facts are in dispute.

Mr. KORNEGAY. Whether or not it is practical to convert the whole country from V's to U's.

Mr. MINOW. Well, or whether in those particular circumstances, given those facts, it is practical to do it. Now, North Carolina, I think it is almost all V for the most part, one U in Asheville. So in other words there are very few people there who have sets which are already equipped to receive the U's. In other words, that is why——

Mr. KORNEGAY. Well, now, they have had more of course in North Carolina.

Mr. MINOW. Right.

Mr. KORNEGAY. You had one in Raleigh that failed.

Mr. MINOW. Gone off the air.

Mr. KORNEGAY. There is one in Charlotte that is just sort of bobbing along, operating part time.

Mr. MINOW. That is right.

Mr. KORNEGAY. Now, is it a fair statement to say that the increase in costs from the all channel over the regular VHF receiver would be about $11? I am not talking about the discount houses and that type of thing.

Mr. MINOW. We think to the consumer it would run around $25. The parts themselves, I think, cost about $11, but by the time you have the markups and distribution, to the consumer it would cost about $25.

Mr. KORNEGAY. In other words, if you go to the store and look at an all-channel set, it is comparable in every way, except for the fact that it is all channel—it would be about $25 more.

Mr. MINOW. That is right. That is true here in Washington today. You could buy that all-channel set here in Washington for about $25 more.

Mr. KORNEGAY. Now, I had understood, before coming here, that an antenna designed for the VHF station would not pick up the UHF. Now, I heard some questions and answers that somewhat eroded my opinion. But I would like to get that.

Mr. MINOW. I think usually they will need separate antennas. It is impossible to generalize, because it depends on where you live. There is an all-channel antenna which has been developed. Some locations can receive it without any antenna. So it is hard to generalize. My guess would be, however, if the all-channel set went into full-scale production, that the all-channel antenna would then be——

Mr. KORNEGAY. Would be standard equipment.

Mr. MINOW. Right.

Mr. KORNEGAY. Of course it is an item of cost, it would be an item of cost to the consumer.

Mr. MINOW. Yes, sir; it is.

Mr. KORNEGAY. Say about $30 in converting or changing his antenna.

Mr. MINOW. That is right—again depending upon where you live and what the particular circumstances are.

Mr. KORNEGAY. Now, we have heard the figure used here of about $250,000, which would be necessary to convert the average VHF station to a UHF; is that not correct?

Mr. MINOW. I think that is correct. I think we have tried to be fair in reaching that figure. I think that would be good coverage and good equipment.

Mr. KORNEGAY. Now, would that be equipment which would give comparable coverage to the V that was being replaced?

Mr. MINOW. I would think not, because there again you are getting into the matter that the signal does not go as far.

Mr. KORNEGAY. Well, the average V now is covering say effectively, in your class B range, 50 to 100 miles, would it not?

Mr. MINOW. Normally I would say beyond 60, 65 miles it is normally not very good.

Mr. KORNEGAY. And your U is down to about 25 to 40.

Mr. MINOW. Forty-five.

Mr. KORNEGAY. About 45?

Mr. MINOW. Forty-five.

Mr. KORNEGAY. So you cut your radius by about 20 miles?

Mr. MINOW. Right. It is too early in our New York test to tell, but I know that people have received good signals in Connecticut, for example, in Danbury, Conn.

Mr. KORNEGAY. But it is possible to step up the power of the U.

Mr. MINOW. Right.

Mr. KORNEGAY. To the point where you could get comparable coverage with the V that was replaced.

Mr. MINOW. Well, except that the signal would not go as far, and that is where you get into translators and repeaters, and these other devices to carry it into other areas.

Mr. KORNEGAY. Now, in order to provide the necessary equipment for a U that would give you approximately the same coverage as the V, it would cost over $2 million; would it not?

Mr. MINOW. No, sir.

Mr. KORNEGAY. What would be your estimate of the cost?

Mr. MINOW. I think the terrain and so many factors enter into it—but I do not think that the $2 million figure is——

Mr. KORNEGAY. Well, that was a figure that had been furnished me.

Mr. MINOW. I do not think you can calculate it that way. It depends on whether other services being available—for one thing. Nobody has built a 5-megawatt transmitter yet. I would be glad to try to submit for the record some estimates from our engineers on that.

Mr. KORNEGAY. In other words, you do not even have the equipment now.

Mr. MINOW. On an experimental basis only it exists now. I think the thing we would like to do there is submit to you for the record a statement of our engineers on that.

Mr. KORNEGAY. All right. I would be interested in getting it.

I think it is pertinent to this inquiry, on the question of service to the public. That is because of the natural restriction which would be brought about by converting or changing the V station to a U station.

Now, it is also far more expensive to operate a U station than it is a V station, is it not?

Mr. MINOW. I do not think——

Mr. KORNEGAY. Comparable power and coverage?

Mr. MINOW. I do not think you can say that there is a very large—it is more power cost.

Mr. KORNEGAY. Engineeringwise, is it not more expensive to operate a U than a V?

Mr. MINOW. No; I think our engineers would disagree with that.

Mr. KORNEGAY. You would say there would be no appreciable increase in operating costs—power costs, additional personnel?

Mr. MINOW. Power costs would be more. But we do not believe that more personnel would be required; no, sir. I know the UHF channel here in Washington, channel 26, is operating on an absolute shoestring, as far as costs are concerned.

Mr. KORNEGAY. Now, as I understand it, Mr. Chairman, it is your view, or the view of a certain portion of the Commission, that the primary reason for the lack of interest in establishing UHF stations is the fact that there are an insufficient number of sets which will receive the signal.

Mr. MINOW. Correct, sir.

Mr. KORNEGAY. And if everybody had a set, which was equipped to receive the signal, then there would be more people interested in investing their money and going into the business.

Mr. MINOW. That is correct. It is the old story of the chicken and the egg.

Mr. KORNEGAY. Yes—I was going to inject that theory—which comes first.

Your approach is, you might say, to let us get the egg first.

Mr. MINOW. Well, open up the audience, that is right. The history of this proposal is that the Commission has been considering all

the alternatives here for years and years and years, and finally when the military closed the door on the possibility of more V's, came to this conclusion in 1960.

Mr. KORNEGAY. Well, is it not a bigger proposition than just that? I mean, do you not also have to take into consideration the programing and the availability, network availability, and all that type of thing?

Mr. MINOW. I think you do. But I think this is the beginning of it. I do not think you can attempt to solve it until you have made this first step.

Mr. KORNEGAY. Of course, one of our basic economic laws is if we create a demand, then the supply will follow. And if there is a demand for this type of service, if it were attractive to the public, then the manufacturers of sets would put them in, would they not?

Mr. MINOW. Well, we hope so—except the experience in the last 10 years has been entirely the opposite.

Mr. KORNEGAY. Your statement says that 10 years ago about 20 percent of the sets were all-channel operation, and now it stands at 15 percent.

Mr. MINOW. That is right. Now, it is interesting that in 1953, of course, it would have been much easier to do this, because then you did not have that many sets outstanding in the hands of the public. Commissioner Hyde, who was Chairman at the time, has told me he wished this could have been done at that time with the manufacturers, who were unwilling to do it. Now, any solution here now involves some dislocation, some cost, some difficulty. We think this is the one that offers the least dislocation and the best long-range promise of a solution. But it is not a perfect solution. We acknowledge that.

Mr. KORNEGAY. In that connection, has any effort been made, or any approach been made to the manufacturers to suggest that they incorporate these receivers?

Mr. MINOW. Yes, sir. The Senate committee investigated this with the manufacturers some years ago. We have talked to the manufacturers. They are faced with a competitive problem. If one goes along and one does not, the one who makes the 12-channel set, which is cheaper, will get a competitive advantage. Also, if they combine and agree to do this on their own, they will run into an antitrust problem. So we have concluded that only through legislation can this be accomplished.

Mr. KORNEGAY. But that area has been explored by the Commission and by the Senate committee.

Mr. MINOW. Yes, sir.

Mr. KORNEGAY. Now, in connection with the educational end of this proposition, basically that is a situation where you would have a new station that would beam its signal, or the signal would be picked up in the schools, in the classrooms—is that correct?

Mr. MINOW. And in homes. There is a very large increase in home viewing of educational television, in the evening, and also some people who watch in the morning.

Mr. KORNEGAY. Well, I am not going to extend this. Many of the questions I had have been asked already. With this final one, I will conclude my questioning.

Insofar as deintermixture is concerned, or this effort to convert existing stations or existing VHF stations to UHF, I would just like

to know, who wants it done, other than maybe certain members of the Commission? As I understand, the public is not interested in it, the station operators are certainly opposed to it.

Mr. MINOW. Well, the UHF broadcasters, who are competing with these, want it done. That is clear. One of the networks wants it done, particularly where they lack competitive outlets. And our duty as a Commission is to protect the public interest as we see it. So that is where you have got the impetus. Furthermore, Congress for, I think, 8 years, has been telling us to solve the allocations problem. Indeed it specifically recommended deintermixture to us on the Senate side. So I think that would give you an answer to the history of how this has all come about.

Mr. KORNEGAY. I do have one other question. That is, Do you anticipate any problem along the lines that you have already spoken of so strongly and bravely of the "vast wasteland" business? That is, with the number of stations that we have now, conceding that they may be limited, it seems that the genius of the TV industry has been unable to come up with enough ideas and enough good programs to keep the stations that are now on the air busy. What is going to happen if we doubled the number of existing stations?

Mr. MINOW. Well, I think one of the principal problems in television now is that unless a program appeals to so many millions of people, it has very little chance. I think this would provide a chance for more diversified programing. That is No. 1.

No. 2, it would provide a great chance for local service, which in many places does not exist.

Thirdly, I think it would provide a chance for independent programing, where independent programing now has very little chance to get on the air. There are only 35 stations on the air now not affiliated with the network. So there is no market really for them to turn to for stations. I think this would create an impetus.

Mr. KORNEGAY. But there the operator would run into a terrific expense, would he not, in programing his own shows?

Mr. MINOW. Right. But I think what we have to do is to provide the chances for people to go into it if they want to. Last, and I would say most important, is the chance for an educational television service, as a fourth alternative national service to the public.

Mr. KORNEGAY. Thank you, sir. Again, I commend you for bringing this rather provocative subject to us.

Mr. MINOW. Thank you.

Mr. DOMINICK. Mr. Chairman.

The CHAIRMAN. Mr. Dominick.

Mr. DOMINICK. Mr. Minow, you have had a pretty long day, so I am going to keep my questions short and, I hope, fairly pertinent.

First of all, you stated in your testimony that there were three criteria on deintermixture.

Mr. MINOW. Yes, sir.

Mr. DOMINICK. One was there should only be one VHF station. Now, does this mean in operation or assigned?

Mr. MINOW. In the eight cases it meant in operation, sir.

Mr. DOMINICK. Does it mean that as a general rule of the Commission?

Mr. MINOW. We do not have—I do not think we have a general rule of the Commission. We have treated most of these matters case by case, and took these eight because they fulfill those three common characteristics. We do not have a general statement of policy on that.

Mr. DOMINICK. The rulemaking—the proposed rule that you issued in July did not say anything about this type of criteria, did it?

Mr. MINOW. Yes, sir; I believe it did.

Mr. DOMINICK. That there should be only one VHF in operation?

Mr. MINOW. No. I think maybe we are talking about two different things. We said these eight were selected because there was only one V in operation.

Mr. DOMINICK. That is correct. But the other implication is there that you were going to go over to UHF in other areas, and have the deintermixture. It did not say anything about that particular criterion.

Mr. MINOW. No. But I think those statements, about which so much has been said, do not take into account that those are general exploratory statements in the rulemaking proceeding, which is perfectly common. This is one of the things we say we are thinking of, and inviting comment about.

Mr. DOMINICK. Which you got.

Mr. MINNOW. Which we have gotten in spades; yes, sir.

Mr. DOMINICK. Let me go on.

Is there a policy as far as the Commission is concerned to stick to those criteria insofar as the deintermixture is concerned?

Mr. MINNOW. We have no other pending proposal before us that I am aware of. These same ones have been stated earlier in 1956.

Mr. DOMINICK. Well, what I am trying to do, for the record, is to find out whether this is a policy of the Commission which you are planning on holding to as far as any deintermixture is concerned.

Mr. MINOW. Well, I think this would get us into the response that we are going to supply the committee about in reply to Chairman Harris' question earlier—and that is what our policy on deintermixture will be in light of the pending all-channel receiver legislation.

Mr. DOMINICK. Now, in Denver, Mr. Minow, we have four VHF stations in operation, one of which is a local station, which is channel 2. It is largely a local station with local shows. So that this statement on page 21 is not entirely correct in its implications. In other words, communities such as these, you say, "will never have a fair chance for a local station unless UHF gets a fair chance." In other words, you can use VHF for a local station.

Mr. MINOW. We are talking about—I think the word "communities" refers back there to where there has been a local U that failed, and where there is no V assignment available.

Mr. DOMINICK. Now, if you go to deintermixture, and there is an area in which the coverage is cut back, do you feel that the Commission has the power to require, first of all, the installation of more powerful stations than are applied for?

Mr. MINOW. I do think we could require—we could put minimum powers in. As a matter of fact, we have encouraged this recently in the radio field with certain smaller stations.

Mr. DOMINICK. Do you feel that you have the power under the existing act to require them to install translators and boosters?

Mr. MINOW. Let me consult a minute.

I think we could require translators as a condition of a license.

Mr. DOMINICK. Could you also require them to raise the height of their tower?

Mr. MINOW. Yes. I think the statute would authorize us to do that under its existing terms in section 303 (a), (b), (c), and (d).

Mr. DOMINICK. Mr. Chairman, in connection with this tower height on a UHF, in order to get comparable power for a VHF, you have to have a much higher tower, do you not, technically?

Mr. MINOW. There would be normally a combination of the two. The equivalents, the exact equivalents, as yet I do not think have been developed. Normally it is a combination.

Mr. DOMINICK. Wouldn't you take up the height of the towers with the Federal Aviation Authority?

Mr. MINOW. Well, that we have pending. That problem we have pending all the time. We have a maximum tower limitation existing, regardless of whether it is a VHF or UHF.

Mr. DOMINICK. I gather that it does take a higher one for a U than a V, as a rule.

Mr. MINOW. It is not the height as much as I think it is the power that is the problem.

Mr. DOMINICK. Can you get the same coverage, then, with the same size tower?

Mr. MINOW. Right. I would like to have our engineer answer that.

Mr. JACOBSON. Greater height does do more good for UHF, because of the fact that the waves do not bend around the earth so well as the VHF. So great height is an advantage in UHF.

Mr. DOMINICK. I want to make this point. As far as Colorado is concerned, which is where I am from, as you know, we have a number of boosters which are picking up stations from Colorado Springs and Denver, from Pueblo, Montrose, and Grand Junction, and they are relaying this into the mountainous area. According to the information I have had—and I do not know whether this is accurate, and I am not an engineer—it would be impossible to supply that mountainous country with UHF without having one practically for ever valley in the mountains.

Mr. MINOW. I think that is so. But the same problem there exists in most cases with the V's.

Mr. DOMINICK. Well, in that case the local communities have already invested their funds in booster stations in order to pick up the V signal and relay it into the various areas. They would be physically incapable of picking the same signals up, or the the same programs up, if you had a UHF in place of the V, because of the distance involved, the terrain—the strength of the signal.

Mr. MINOW. Well, that is if we substituted a U for a V.

Mr. DOMINICK. Correct.

Mr. MINOW. And as I have said, we are not going to do that if that results in a significant loss of service. So I think it would be most unlikely. There is no such proposal pending in Colorado, sir.

Mr. DOMINICK. No; I know there is not. The implications of the proposed rule are what were bothering the public in my area.

Now, there is one more point that I really would like to tie down, if you can do it for me. It might relieve a lot of people in my area.

Is it the general policy of the Commission at the present time not to start deintermixture procedures unless you have the criteria which applies to the eight that you are now involved with?

Mr. MINOW. Yes. I think I can say we have none other planned, certainly—none other in mind.

Mr. DOMINICK. Thank you, Mr. Chairman.

Mr. MACK. Chairman Harris is out of the room at the moment, and he would like to ask a few questions. But in the meantime, I would like to proceed.

First, Mr. Chairman, I would like to commend you on your testimony today. You have been very patient with us. You have been here a mighty long time.

Mr. MINOW. I think you have been very patient with us. But I do think this is a most important matter, Congressman Mack, and very complex. I am very grateful that we have had a chance to express ourselves fully about it.

Mr. MACK. On that we are in complete agreement.

I want to just follow through on our discussion. I did not have the chart before me when we were talking about Jacksonville, Ill. On checking the table of assignments, I see that it is not an educational station.

Mr. MINOW. No. They are asking that it be reserved. It has not—the petition, I think, has not been acted upon yet.

Mr. MACK. But it has been available there all the time during this period.

Mr. MINOW. That is correct, sir.

Mr. MACK. The so-called deintermixed area. And no one has applied for it.

Mr. MINOW. That is correct, sir.

Mr. DOMINICK. Will the gentleman yield at that point?

Mr. MACK. I would be glad to.

Mr. DOMINICK. I want to comment that we have six unassigned—assigned, but unallocated, VHF stations in Colorado and I do not know how many UHF, and no one has applied for them.

Mr. MACK. Yes. I made reference to that when the gentleman was not here—that many of the VHF channels were existing in Western States, where they had no applicants, and evidently a feeling that it could not be economically supported in the area. I thank the gentleman.

I notice there is also an assignment to Lincoln, Ill., and the gentleman I am sure is familiar with that area.

Mr. MINOW. Yes, sir.

Mr. MACK. The land of Lincoln—I am sure he is familiar with that.

Mr. MINOW. Yes, sir.

Mr. MACK. And I presume no one has ever made application for that.

Mr. MINOW. I believe not.

Mr. MACK. And this also is in this so-called deintermixed area.

I have great reservations about it generally, as to whether or not this would be successful, even if you proceeded with your deintermixture on a large basis—whether it would solve the problem. I want to call that to your attention today.

I want to just have one point clarified. Mr. Chairman, is there any question in your mind concerning the superiority of VHF television?

Mr. MINOW. There is no question that the VHF signal goes out farther. On that, I think there can be no question. As to the superiority in other fields, I think there are questions. Our engineers feel in some respects the UHF is superior to the VHF. On the question of, however, the distance the signal goes, I do not think there is any debate about that.

Mr. MACK. Well, in what area would the UHF be superior?

Mr. MINOW. In 1956 an engineer testifying before the Senate committee, I think, summed it up pretty well—it is an engineer for a VHF station, Mr. John H. DeWitt. I can give you the Senate committee citation.

Mr. MACK. I am more interested, of course, in your opinion.

Mr. MINOW. Well, I agree with this.

Mr. MACK. If you want to quote from someone else, that is fine.

Mr. MINOW (reading):

There is less manmade and cosmic noise in the UHF band, so a UHF picture is likely to be a cleaner picture than a VHF picture, and also it is also much easier to construct a highly directional receiving antenna for UHF frequencies; it is much easier to eliminate ghosts in this band. It turns on also that with the development of high power——

Mr. MACK. Excuse me. That would be shadows—ghosts?

Mr. MINOW. No; double pictures where you see two images. [Continues reading:]

it turns on also that with the development of high power Klystron tubes, it is easy to generate high transmitter power for transmission in the UHF band.

I think those are the principal matters.

Mr. MACK. You have mentioned the interference in the limitation on coverage in an area.

Mr. MINOW. Right.

Mr. MACK. It seems that the disadvantages far outweigh the advantages of UHF.

Mr. YOUNGER. Will the gentleman yield?

Mr. MACK. Well, I would like to have the chairman's comment on that.

Mr. MINOW. I am not an engineer.

Mr. MACK. As I understood, Mr. Cox's reply to Mr. Sibal was to the effect that you have just as good television if you increase the power on UHF.

Mr. MINOW. The viewer, I think, receives just as good a service, and just as good a picture; yes, sir.

Mr. COX. It was certainly not my intent, Congressman Mack, to indicate that the increased power, at least with presently available equipment, would overcome this basic difference in the propagation characteristics of the frequencies. We have not been able, with all the progress in AM radio, to make a station on 1600 equal in its ability to get a signal out to a station on 550. You have the same problem in the television frequencies, as well.

What I did say was that many of the UHF stations that have operated, because of the competitive problems they have had, have not built maximum facilities, have not done as good a coverage job as is technically possible, and as the Commission feels might happen if competition were equalized.

Mr. MACK. Well, it would be almost impossible under present conditions to make the UHF as good as the VHF—that is, being reasonable about it. Using your 5 megawatts and an antenna 2 miles high, something of that nature, you could approach it. But that would not be feasible, would it?

Mr. MINOW. In terms of what is feasible, you cannot ordinarily equalize the distant coverage, no.

Mr. MACK. Well, now, Mr. Chairman, if the performance of UHF was as good as VHF, then there would be no necessity for deintermixture, would there?

Mr. MINOW. That is right. But one of the principal problems is, as I said, that the signal does not go as far.

Mr. MACK. And what you propose to do is to limit the signal by assigning UHF frequencies, removing the VHF frequencies, and substituting two or more UHF frequencies.

Mr. MINOW. We have not decided anything yet. I have tried to express the fact that the rulemaking proceeding is pending.

Mr. MACK. Well, I am trying not to talk about the rulemaking proceeding. We have heard about the deintermixture—the word "deintermixture" we have heard for several years. I understand that Mr. Lee, Robert Lee, is rather responsible for bringing that into the forefront. I wanted to clarify the general problem of deintermixture.

Now, is that not what that is?

Mr. MINOW. Well, Mr. Lee will be here tomorrow to speak for himself. The general problem of deintermixture is to try to make, by deleting a V and substituting a U—is to try to make it competitively equal for all the broadcasters in that area. That is the general theory. And also to provide a choice of service to the viewer. That is the purpose of deintermixture.

Now, when you find, on the basis of studying the facts, that a proposed deintermixture would result in a loss of service to the public, then the Commission is not going to deintermix.

Mr. MACK. Are you not confronted with that problem in every area, with a proposed deintermixture, except perhaps some area where, as you have indicated the station is not on the air?

Mr. MINOW. Yes. Every deintermixture has aroused these very same problems; yes, sir. The same contentions are made in every deintermixture case.

Mr. MACK. So you are in each case limiting the service to the people.

Mr. MINOW. No, sir. We are not limiting the service to the people. We are trying to do exactly the opposite.

Mr. MACK. If you substitute the VHF for the UHF—if you substitute the UHF for the VHF, it would produce a reduction in the service.

Mr. MINOW. If we did that. But I have tried to make clear—apparently I am not getting through. We have never deintermixed an area which resulted in a loss of service to the public.

The CHAIRMAN. Well, let us put in this way—if the gentleman will permit me to help out on this.

Mr. MACK. Yes.

The CHAIRMAN. You have never deintermixed anything which the Commission thought resulted in a loss of service.

Mr. MINOW. I accept that amendment.

Mr. MACK. Well, I am not certain I fully agree—since you have only deintermixed basically—settled one area, and that is the Fresno area.

Mr. MINOW. No. Elmira, Evansville, Peoria, only.

Mr. MACK. Well, now, I would like to have that clarified. In my opinion, neither Peoria nor Springfield has been deintermixed. If it has not been deintermixed, the stations are still there.

Mr. MINOW. Peoria was a situation where the V was never on the air. That is the only difference. But the V has been assigned to Peoria and was deintermixed.

Mr. MACK. Quite briefly, the reason I do not believe that this could ever be successful is the fact that you are going to leave hundreds of people, if not thousands of people, without any type of television service at all.

Mr. MINOW. Congressman Mack, I assure you we are not going to do that.

Mr. MACK. My entire eastern side of the congressional district will be without any television service from Illinois.

Mr. MINOW. I assure you, on behalf of the Commission, we are not going to deprive people of any significant service.

Mr. MACK. Well, if you take these towns the size of 10,000, I think we are day-dreaming if we feel that you can support a UHF television station in towns the size of 10,000. And if you cannot, then we are going to deny these people in these areas any type of television service.

Mr. MINOW. The Commission will never decide, on the basis of potential service. It will be on the basis—the Commission is not going to deprive people of any significant service. I do not know how many more times I can say this. But that is our view.

Mr. MACK. Well, in my opinion, that would be the ultimate result of a deintermixture program if you are using UHF. I do not know any way in the world that you can close all the gaps that would be left when you substitute UHF. If you have one city which has one channel, VHF channel, which has a radius of 70 miles, and you reduce that and put in two UHF channels which have a radius of 45 or 40 miles or 50 miles, then you are taking two facilities to serve less than half the people that were served by one facility.

Mr. MINOW. That assumes we will decide a case completely contrary to the criteria we have established.

Mr. MACK. I do not want to prolong the testimony today. I wanted to ask about the New York test finally.

Mr. MINOW. Yes, sir.

Mr. MACK. I wanted to say first of all, from the very beginning, it would seem to me that it would be much better to place your UHF stations in the metropolitan areas where you have a high density concentration, than put them out in the rural sections where——

Mr. MINOW. I think if you were starting off on a clean slate from the beginning, I think there is a great deal to be said for that.

Mr. MACK. But the procedure presently seems to me that we would end up reducing service, or eliminating a type of service for these people.

Mr. MINOW. Well, I assure you we are not going to do that.

Mr. MACK. Mr. Chairman, could you tell me approximately when the New York test will be completed?

Mr. MINOW. By the end of this year, sir.

Mr. MACK. Is there anyone associated with this test that is working to improve the operation of the UHF transmitter?

Mr. MINOW. Yes. One of the main things we are hoping to learn there is whether there are specific ways and means to accomplish that.

Mr. MACK. Do you have anyone, any private company that is trying to develop that?

Mr. MINOW. RCA—Commissioner Lee and I recently had a meeting with RCA, which is independently doing certain measurements to do some checking. In addition we are doing our own measurements. We have hired Jerold to do these measurements for us—Jerold & Adler Electronics.

Mr. MACK. Would this include your receivers and tuners, as well as the transmitters?

Mr. MINOW. We are putting certain receivers into homes to test reception. I think there is a private contract down there. Commissioner Lee is much better informed on that than I am. He will be here tomorrow.

Mr. MACK. Is it an objective of the test to produce information which would make it possible to strengthen the UHF signal?

Mr. MINOW. Yes, sir.

Mr. MACK. It seems to me that in these days, when we are navigating outer space, we ought to be able to solve a problem similar to this. If this problem were to be solved, then again there would be no need for deintermixture, would there?

Mr. MINOW. If the signal went out as far, you would still have the problem of incompatibility of receivers. It would not solve that.

Mr. MACK. But your legislation before us would solve that.

Mr. MINOW. The legislation——

Mr. MACK. The legislation before us, if it were enacted, would solve that problem.

Mr. MINOW. It would solve the incompatibility of receiver problem.

Mr. MACK. Then there would be no need, under the circumstances, if the legislation before us were to be approved—there would be no need for the so-called deintermixture.

Mr. MINOW. No, sir. I did not hear the last part of your question. I am sorry.

Mr. MACK. Well, I asked first if the performance of UHF were developed so that it would meet the same standards of VHF, then there would be no need for deintermixture, and you raise the question of the matter of all-channel receivers. I further added that if this committee approve the legislation to meet that problem, then, under those circumstances, there would be no need for deintermixture.

Mr. MINOW. That is right, sir.

Mr. MACK. Thank you very much.

The CHAIRMAN. Mr. Chairman, you have been here a long time, and you are tired. I am not going to detain you any longer—except I did want to pursue for just a very brief time the technical provisions of the bills referred to by Mr. Roberts and some of the companion bills. You mentioned in your statement something about the provisions of that bill. But no one has asked you what that bill would permit the

Commission to do or prevent the Commission from doing other than that it would prohibit the deintermixture.

Now, do I understand the language referred to in the bill, on page 2, "Any community on or prior to September 1, 1961"—that the Commission would be prohibited from deleting assignment of certain frequencies?

Mr. MINOW. That is correct, sir.

The CHAIRMAN. Now, is it not a fact that that would permit the Commission to use these channels for some other purpose?

Mr. MINOW. I think they could be used for nonbroadcast purposes, after a rulemaking proceeding, for example.

The CHAIRMAN. Could it not be used for other purposes than commercial broadcast?

Mr. MINOW. Yes, they could be used for educational purposes.

The CHAIRMAN. There will be nothing then in this language to prevent the Commission, under these circumstances, from saying that in a community where you have got one VHF and three UHF, you are going to permit the three UHF to broadcast commercial broadcasting and assign VHF to educational television.

Mr. MINOW. Well, as I interpreted—I would like to have the General Counsel's view—I think that is right, because you could leave the assignment there.

The CHAIRMAN. Yes. In other words, the Commission would then, by this language, not be prohibited from actually, if it saw it was in the public interest, then to make that an all-VHF community.

Mr. MINOW. Well, what you could do—you could—you are giving me ideas, Mr. Chairman—you could, for example, convert an existing U educational channel to a V, I think, consistent with this language.

The CHAIRMAN. Now, is it not also a fact that if the Commission found that it was in the public interest, and even though the people in that community wanted to do it, that a transfer of a VHF to an adjoining community, to provide better overall service, that you would be prohibited from doing that?

Mr. MINOW. You could not do that.

The CHAIRMAN. In other words, to freeze VHF stations as they are presently assigned, under the circumstances, could virtually mean that the Congress, by this action, would actually get into actual assignment of channels itself.

Mr. MINOW. We think so, sir. We think this gets into the allocation.

The CHAIRMAN. That would be like the Congress trying to make rates under the Interstate Commerce Act.

Mr. MINOW. I think the analogy is very close. We couldn't shift channels to make room for another one, depending on a population change or something that is unforeseen.

The CHAIRMAN. On page 17 you state:

> Let me make it perfectly clear that if the all-channel receiver legislation is enacted, it will certainly be an additional factor to be considered in determining whether or not the public interest will be served be deintermixture.

Mr. MINOW. Yes, sir.

The CHAIRMAN. In other words, that is a very emphatic statement the Commission is making to the committee.

Mr. MINOW. Right, and we mean it very emphatically. I am frank to tell the committee that we did not see that the prospects for the all-channel receiver were very bright when it was first proposed. If it is passed, it would have a great impact on our thinking.

The CHAIRMAN. Following then the procedure, does the Commission, under the present act or the law, have the power to discontinue rulemaking proceedings such as deintermixture proceedings?

Mr. MINOW. I think we can terminate any rulemaking proceeding at any time. Commissioner Hyde points out we could always issue, as we do periodically, further notices requesting comments, depending on a change in circumstances, especially here with respect to the educators, whether demands actually have come to our attention more recently. They have now told us—and I would like to suggest at some point, Mr. Chairman, that I submit for the record their report to us on their nationwide survey of their need for channels, if I could.

The CHAIRMAN. We would be glad to have you do that.

(The information requested may be found in the files of the committee.)

Mr. MINOW. They have told us subsequent to the issuance of our notice of rulemaking that they need 900 channels.

The CHAIRMAN. Does the Commission have authority, under the law, on its own motion, if it believes it to be in the public interest, to discontinue the present rulemaking procedure that you have underway on deintermixture?

Mr. MINOW. Yes, sir. With any rulemaking proceeding, we could close it out on a report and order, or ask for further information. We have great flexibility there.

The CHAIRMAN. Well, can you do it without asking for further information?

Mr. MINOW. Yes, sir.

The CHAIRMAN. You would not, then, have to do this by agreement with the interested parties.

Mr. MINOW. No, sir. It seems to me—this is initiated by the Commission, and the Commission can act to conclude it as it desires.

The CHAIRMAN. Well, then, to put it just in another way, in order that the record may be very clear: If the Congress were to enact all channel receiver legislation, the Commission then, if it felt it in the public interest, could discontinue the existing deintermixture proceedings.

Mr. MINOW. Yes.

Mr. YOUNGER. I would just like to comment. It seems to me after hearing this testimony that you have kind of classified UHF in the television field along with FM in the broadcasting field.

Mr. MINOW. I think the analogy is very clear, Congressman Younger. I might add FM is now beginning to come into its own.

The CHAIRMAN. Well, now, I do not want to get into these proceedings in the *Sangamon Valley* case. I have tried myself, and I have tried to see that the other members of the committee, refrain from pursuing any questions on proceedings which you have before you for decision. But as a matter of policy, what Mr. Mack and Mr. Springer have tried to get from you all day is this:

Would the deintermixture proceedings underway in Springfield, Ill., moving the VHF to St. Louis, Mo., come in the same category of

general proceedings as the eight proposed deintermixture proceedings.

Mr. MINOW. My answer would be "Yes." But I would want to study the language of the court opinion and the court order before I could give you a really definitive answer to that. I would want to get the advice of our General Counsel on that.

The CHAIRMAN. I can understand that. When you file your statement on this subject matter, and you say you will file it within a week, probably, after the hearings——

Mr. MINOW. Yes, sir.

The CHAIRMAN (continuing). Would you include such information as you feel that you could include with reference to that deintermixture proceeding?

Mr. MINOW. We will do so, sir.

(The information requested follows:)

FEDERAL COMMUNICATIONS COMMISSION,
Washington, D.C., March 16, 1962.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR CHAIRMAN HARRIS: At the March 6 hearing before your committee on H.R. 8031 and other bills, it was requested that the Commission submit its views on four questions, dealing with the effect of the enactment of all-channel TV receiver legislation on Commission proceedings proposing to deintermix particular areas to all UHF. The questions and our views thereon are set out below.

1. *Is the Commission in a position to make a representation to the committee that if legislation providing for all-channel receiving sets is enacted, the Commission would postpone any further consideration of all deintermixture until such time as it could see from experience how the all-channel receiver authority will work out—perhaps 5, 6, 7 years?* (transcript 201). The Commission, after study, has made the following judgment: The Commission would regard enactment by this Congress of the all-channel receiver legislation as a major change in the circumstances affecting its deintermixture proposals and as a major factor to be considered in determining whether or not the public interest would be served by deintermixing any of the communities now under consideration. As the Commission made clear in its statement of March 6, we do not conceive of selective deintermixture as a general or long-range solution for the television allocations problem. Rather, we believe that we will need a system using both UHF and VHF channels, and that all-channel receiver legislation is the basic and essential key to that long-range goal. For with this legislation, time would begin to run in favor of UHF development. The UHF operator (both commercial and educational) could look forward to UHF receiver saturation not only in his home city but in the surrounding rural area as well, and could expect improvement in the quality of the UHF portion of the receivers in the hands of the public. With increased use of UHF, and increased incentive for both equipment manufacturers and station operators to exploit its maximum potential, there is reason to believe that several of the problems which presently restrict the coverage of UHF stations would be overcome. (Statement of Mar. 6, pp. 13, 17.)

In short, as we stated in our notice of proposed rulemaking in docket No. 14229, the all-channel receiver is "critically important" because it is directed squarely to "the root problem of receiver incompatibility." It is our hope and belief that the achievement of set compatibility will make possible a satisfactory system of intermixed assignments, and immeasurably promote educational TV. (Statement of Mar. 6, pp. 20–21.) It will enhance the development of three fully competitive network services and perhaps eventually of still further network service. For these reasons, the Commission makes the rep-

resentation to your committee that if the all-channel receiver TV legislation is enacted by this Congress, it is the judgment of the Commission (with the qualification noted in 4, infra) that it would be inappropriate, in the light of this important new development, to proceed with the eight deintermixture proceedings initiated on July 27, 1961, and that, on the contrary, a sufficient period of time should be allowed to indicate whether the all-channel receiver authority would in fact achieve the Commission's overall allocations goals.

The argument has been made that the Commission is not in a position to transmit this judgment to the Congress for two reasons: (1) that such action would contravent the principle set forth in the *Sangamon Valley* decision (269 F. 2d 221 (C.A.D.C.)); and (2) that under the Communications Act, the Commission is required to go forward to a resolution of the deintermixture proceedings on their merits. We do not believe that either argument has merit. As to the second, the Commission has in the past suspended or terminated its processes because of the emergence of new overriding factors not foreseen at the time of institution of those processes. We think such decisions to defer or postpone action fall within the discretion of the Commission (*cf. Coastal Bend Television Corp.* v. *U.S.*, 234 F. 2d 686 (C.A.D.C.)), subject, of course, to review by the courts to determine whether the action is arbitrary. We regard out position in this instance as wholly reasonable in the light of the considerations set out in the prior paragraph.

As to the *Sangamon Valley* question, the Commission is well aware of its responsibilities under this decision. Thus, as we made clear in our recent testimony before your committee (and were sustained by the chairman of the committee—see, e.g., transcript 281–282, 285, the Commission cannot and will not take into account nonrecord presentations by interested parties, or those acting on their behalf, as to the issues in the pending proceedings (such as the amount of "white area" that would result from any deintermixture action). But *Sangamon Valley* does not preclude congressional inquiry, in connection with pending legislation, as to possible overall Commission action in the event of enactment of that legislation, nor does it preclude the Commission from supplying to the Congress such information of an overall nature as Congress deems necessary in its consideration of the legislation. The facts of *Sangamon Valley* involve, we believe, the wholly different question of ex parte presentations by an interested party made in the offices of Commissioners on the particular merits of the pending rulemaking proceeding.

In short, we believe that it is wholly proper to transmit this judgment to the committee. We wish to make clear that in doing so, we are not foreclosing fair consideration of any further pleadings in these proceedings (such as a petition for reconsideration under sec. 405 of any final order issued by the Commission). Under the law such pleadings must be considered on their merits and they will be so considered. But, in connection with your consideration of pending legislation, you have asked for the Commission's judgment as to what it would do in the event of enactment of the all-channel receiver legislation by the Congress, and we have given you that judgment.

2. *In connection with the foregoing matter, would the Commission also make the further representation that before any general policy*

concerning deintermixture would be undertaken at the conclusion of the moratorium period, this committee would be advised? (Transcript 202). The Commission does make this representation. The Commission would give the committee and other interested congressional committees periodic reports during any moratorium period decided upon. Before undertaking the implementation of any policy concerning deintermixture, the Commission would advise the committee of its plans and give it an appropriate period of time to consider the Commission's proposals.

3. *Would the Commission consider a moratorium written into the law and providing that the Commission will not take any further action looking to deintermixture of an area to all-UHF until the Congress permits such action* (transcript 202–203)? As we understand this proposal, a statutory prohibition against any Commission action shifting a VHF operator to UHF in order to effectuate an all-UHF area, would continue until ended by action of both Houses of Congress. The Commission does not favor this approach. For it means, in effect, that if the all-channel legislation proves inadequate, and the Commission feels that some form of deintermixture is desirable in order to achieve the purposes of the Communications Act (e.g., secs. 1, 303(g)), it would have to seek the equivalent of an amendment to the act. In our opinion, such a statutory scheme would render administrative policy inflexible and ineffective.

The Commission hopes and believes that the all-channel legislation will achieve its goal and make possible "a satisfactory system of intermixed assignments" (par. 10, "Notice of Proposed Rule Making," docket No. 14229). But if it does not, the *agency* clearly has the duty to take further action. For, such action will have to be based on evaluation of complex economic and engineering factors. It is for this reason—to facilitate action taken after this kind of evaluation—that Congress created the agency. Congress recognized the desirability of delegating to the Commission the task of sifting the factors involved in complex allocations proceedings such as a sixth report and order or a clear channel report and order. It therefore gave the Commission the broadest flexibility to deal with this dynamic industry (*F.C.C.* v. *Pottsville Bctg. Co.*, 309 U.S. 134, 137–38; *NBC* v. *U.S.*, 319 U.S. 190, 215–219).

Under this proposal (transcript, 202–203), however, the Commission would be stripped of much of its flexibility at the critical period when it was most needed. We fully recognize that in the event the all-channel legislation falls short of achieving its goals, Congress will want to carefully consider any Commission proposals. We would welcome such consideration. But if Congress restricts the Commission's discretion in this vital area, then it must act itself. The responsibility for development of the nationwide television system would then rest with the Congress, and, contrary to sound and well-established tradition and policy, the agency will have only the most limited role and discretion.

For these reasons, we strongly urge that the Commission not be deprived, in this area, of the broad discretion which Congress gave it to meet changing problems and circumstances. We believe that there is no reason for not following the established policy of over a quarter of a century of permitting Commission action under the

public interest standard, subject to congressional and judicial review. See statement of March 6, page 18.

4. *With respect to any moratorium would deintermixture proceedings such as the Springfield, Ill. proceedings fall into the same category as the eight deintermixture proceedings proposed last July 27* (transcript 320)? For reasons fully developed in the attached appendix, the Commission believes that any agency moratorium (see 1) on deintermixture to all-UHF would not be applicable to the deintermixture proceedings in (1) Springfield, Ill. (docket No. 14267); (2) Peoria, Ill. (docket No. 11749); (3) Bakersfield, Calif. (docket No. 13608); and (4) Evansville, Ind. (docket No. 11757).

We hope that the foregoing and the attached appendix make clear our views. If, however, your committee has any further questions, we shall be glad to answer them.

Thank you again for permitting us to state so fully our views on this most important matter. We greatly appreciate the committee's efforts on behalf of this legislation (H.R. 8031), so essential to the development of the truly nationwide TV system described in our statement of March 6.

By direction of the Commission.[1]

NEWTON N. MINOW,
Chairman.

The CHAIRMAN. You have been here a long time. I know you are tired. I want to thank you and the Commission for your appearance here today, and compliment you again on the splendid testimony that you have presented on a very difficult, tedious, complicated problem.

Mr. MINOW. Thank you, Mr. Chairman. I would in closing only say one word. I want the committee to be aware that the all-channel receiver bill has been a Commission policy since 1960—in other words, before I joined the Commission. I subscribe to it fully and enthusiastically myself, and it represents the combined view of all seven of us. I think that that should—I would hope—influence the committee in recognizing in the deliberations that we are unanimous on this.

The CHAIRMAN. I think I understand the attitude of the Commission, and I think you are to be complimented for it. I think you have made yourself abundantly clear on the subject matter.

I have kept you here late, but I have done so in order to try to conclude with the Commission this afternoon, and not have you come back tomorrow. We have many other witnesses. We have got to proceed with this hearing so we can get through this week.

Now, Mr. Lee's statement, as he requested, will be included in the record at this point.

(The statement of Commissioner Lee follows:)

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[1] Commissioner Lee maintains his position as set forth in his statement before the committee. Because of his former connection (prior to nomination as Commissioner) as engineering consultant in regard to the deintermixture of Springfield and Peoria, Ill. Commissioner T. A. M. Craven did not participate in the consideration of the Commission's comments in this letter with respect to those areas. Otherwise, Commissioner Craven concurs with the views of the Commission majority.

FEDERAL COMMUNICATIONS COMMISSION,
Washington, D.C., March 16, 1962.

Hon. OREN HARRIS,
Chairman, House Interstate and Foreign Commerce Committee,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: This communication refers to a letter sent to you by Chairman Minow on behalf of the Federal Communications Commission under date of March 16, 1962, respecting the all-channel receiver legislation proposals pending before your committee. As noted in that letter, I do not join the majority of the Commission in respect to the position therein set forth.

I have given my support to this legislation, and will continue to do so, as I consider that its enactment will provide longterm benefits to the general public.

However, I am strongly of the view that the specific deintermixture proposals of the Commission, to which much testimony has been addressed, should each be viewed on its own merit, upon the basis of the record before us in each case. I consider that the relationship between our proposed legislation and these cases is such that, while they complement each other, neither can be a substitute for the other. Hence, I urge that you consider our proposed legislation independently and upon its own merits.

As you know, the Commission also has before it eight proceedings which propose assignment of new VHF channels in as many communities, at substandard geographic spacings. These proposals are intended to serve a purpose similar to the eight deintermixture proceedings, i.e., to enhance the availability of competitive facilities in the affected communities. It would appear that, were the Commission to refrain from finalizing the deintermixture cases, logic and judgment would require that similar treatment be applied to these drop-in cases.

Thank you for the opportunity of submitting my own views in this matter.

Sincerely yours,

ROBERT E. LEE, *Commissioner.*

STATEMENT OF COMMISSIONER ROBERT E. LEE, FEDERAL COMMUNICATIONS COMMISSION

Mr. Chairman, in view of the fact that the hearings on the all-channel-set legislation have necessarily brought into examination the whole question of allocations, I appreciate this opportunity to put myself on record in this regard.

I would like to say that I strongly support the all-channel legislation but I do not feel that it is appropriate for this legislation to deny the Commission the right to take other actions to solve the problem, including the matter of the deintermixture of certain areas of the country.

I have long urged, as the committee is well aware, that all of television belongs in the UHF portion of the spectrum and, with the indulgence of the committee, I would like to explain how I arrived at that conclusion.

THE DUTY OF THE COMMISSION IN THIS AREA

As I read the Federal Communications Act of 1934, there are three sections that require the Commission's attention to allocations problems.

Section 1 of the act requires the Commission to—

> make available so far as possible, to all the people of the United States, a rapid, efficient, nationwide and worldwide wire and radio communication service with adequate facilities at reasonable charges, for the purpose of the national defense, for the purpose of promoting safety of life and property, etc.

Section 303(g) provides:

> Study new uses for radio, provide for experimental uses of frequencies, and generally encourage the larger and more effective use of radio in the public interest.

Section 4(o) provides:

> For the purpose of obtaining maximum effectiveness from the use of radio and wire communications in connection with safety of life and property, the Commission shall investigate and study all phases of the problem and the best methods of obtaining the cooperation and coordination of these systems.

I would invite your attention to the fact that the requirements enumerated in the act are directed to a communications system and are not necessarily limited to broadcasting.

As a Commissioner, I entered on duty on October 3, 1953, and with these requirements in the act I had to look at these most vexing allocations problems and arrive at a conclusion in my own mind as to what the best solution should be.

For purposes of my study I then had to examine what the Commission has done in the area of television allocations. Recently the General Counsel furnished the Commission with lists of actions that the Commission has taken of an official nature since 1952 in this area and they comprise some 21 typewritten pages, which include a number of individual rulemakings.

In general and to hit the main points, it might be said that prior to 1948 the Commission granted some 108 television station licenses in this then new field largely on a case-to-case basis.

Subsequently realizing the impact that this new media was going to have on the American public and the demands for this new service that would be coming, and with the experience in AM allocations behind them, it became apparent that a case-to-case basis would not work.

The Commission in 1948 froze any further assignments of television stations pending a study as to what standards should apply and where stations should be assigned consistent with the limited number of stations available.

This so-called freeze on stations lasted until 1952, at which time the so-called television allocations table was adopted, which placed specific assignments in specific communities based on certain standards and criteria that were the considered judgment of the Commission at that time. These standards and presumptions need not be repeated in detail here as they are well known to the committee, but I think it is important to remember that the assignments were somewhat influenced by the existing 108 stations that had been assigned on a case-to-case basis and perhaps the most important assump-

tion of all was the fact that the Commission assumed that the assignment of UHF stations in the same market with VHF stations would permit them to compete side by side on an equal basis.

I think it is important to remember at this point that the term UHF versus VHF is not a precise difference but merely a convenient term that was coined by the engineers to show the difference between channel 13 and the succeeding channels. Actually, the higher VHF stations intruded into part of the UHF spectrum and it is likewise important to remember that while there are 82 channel assignments they are not in a contiguous band in the spectrum but are separated by a number of other services.

Since 1952 we have engaged in long and protracted hearings making the assignments to specific individuals as they applied for them and at this point I think it is fair to assume that all of the feasible assignments based on existing standards have now been granted.

Our experience since 1952 has demonstrated satisfactorily to my mind that, short of Government intervention of some kind, the UHF service cannot successfully compete with the VHF in the same market as demonstrated by the fact that some 90 have tried and failed.

We have had any number of proceedings on this subject, all to no avail, primarily because we have carefully sought to find a solution without some temporary disruption, and this solution, I submit, is not available.

Therefore, I, as a Commissioner, having examined this situation over the years of my service, conclude that the public interest would be best served by a gradual transition of television broadcasting to the UHF portion of the spectrum. I reach this conclusion by examining all of the alternative methods, but first I make an assumption. Here, I would like to make the point that if you do not agree with my assumptions, there is little sense in arguing. If you do agree with my assumption, I believe you must agree with my conclusion.

My assumption, briefly stated, is that the status quo is intolerable, since UHF cannot exist and develop in the face of VHF competition.

ALTERNATIVE METHODS OF MEETING GROWING DEMANDS

(*a*) Revision of standards—directional antenna, reduced station separations, and so forth.
(*b*) Additional VHF frequency space from military.
(*c*) Expanded deintermixture on a selective basis.
(*d*) A shift to all UHF in 5 to 8 years.
(*e*) Subscription TV on U only.
(*f*) Legislation for all-channel receiving set.

DISCUSSION OF THE STATUS QUO

Before proceeding to examine each of the alternative methods that seem to be available, I believe it is appropriate to have a brief discussion of the public interest considerations that make, at least in my judgment, the existing situation intolerable.

The existing system was based on the theory that the VHF (12 channels) and the UHF (70 channels) could exist side by side in the same markets, thus providing for posterity 82 TV channels.

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We now know that this premise, despite its careful evaluation at the time, is simply not true. Where intermixture, that is, the assignment of the UHF and VHF in the same market, was tried, the UHF station at some point inevitably failed, and only in a few limited areas where VHF is curtailed or nonexistent is there any expectancy that the UHF stations can continue to operate much longer.

Thus, in my judgment, the maintenance of the status quo necessarily means that we must give up from nonuse the UHF portion of the spectrum, thus limiting ourselves and posterity to 12 VHF channels.

By limiting the number of facilities in any given market we preclude the development of independent stations or additional networks to provide for more variety in programing service.

We have recently completed 3 weeks of public hearings at which time we heard the three television networks. It is interesting to note that in one aspect they were all in agreement and that was that most of the problems in television programing would tend to disappear with the allocation of additional effective stations, and by having additional facilities it would be possible to program more for the interests of minority viewers, who are so articulate in their condemnation of television programing.

By limiting television to the 12 channels, except in the relatively few large markets where 4 or more VHF stations are operating, syndicated film will be largely unavailable during prime time.

Present television receivers in circulation number approximately 55 million. We are all agreed that we are in an era of tremendous population growth where in our lifetime we will see a population of 200 million and perhaps a set count of 100 million.

With this sort of growth in our economy, it would seem foolhardy to freeze television facilities where we now find them. An important adjunct of this point, as the Congress is well aware, is the fact that the presently restricted system makes it a national rather than a regional or local medium as evidenced by the fact that currently only 25 percent of total advertising expenditures on television may be classified as local. So much of the time of existing stations, particularly in evening hours, is taken up with network and other national advertisers that stations find it difficult to provide sufficient access for local programs and local advertisers.

Our prosperity is contingent on a continuing increase in consumer consumption based on the increase in population and the expected rise in per family income over the next decade. Related is the probability that the workweek will be shortened, providing more leisure hours. TV advertising is an important stimulus for these basic social and economic factors. With these expectations the continuation of the status quo puts a ceiling on advertising or alternatively degrading programing by more and more advertising copy.

The maintenance of the status quo means that UHF broadcasting will remain largely unimplemented and Government and other prospective users may rightly make claim to this portion of the spectrum.

Also of paramount importance is the fact that educational stations must be developed by having compatible channels, certainly in the large population centers, such as Los Angeles, Washington, Baltimore, Cleveland, Cincinnati, Detroit, and so forth.

Approximately two-thirds of the TV allocations for educational purposes are in the UHF band, and while this adequately serves the school

needs, the development of adult educational television is most severely handicapped in the intermixed markets.

So much for the status quo discussion and now to briefly examine the various alternatives previously enumerated by me.

ALTERNATIVE A

Reduction of separations, directional antenna, and so forth: Obviously, such a course of action would provide more facilities but at a price that I do not think we are willing to pay. It would violate engineering principles of long standing and the new facilities created would not be effective due to the limited powers and ranges of service, and hence would not be competitive with existing stations. On this basis we would soon be faced with a clamor from the newly created inferior service for equality and the only way to grant this equality would be to degrade the existing VHF service. This, in my judgment, would result in islands of service among seas of interference.

ALTERNATIVE B

Additional VHF space from the military: I believe that this matter is largely moot since we were turned down with finality after a long study on August 8, 1960. It is my judgment, based on the justification that was submitted by the military, that they had a very good case for maintaining what they have, and I do not think that it would be appropriate for this Commission to act against the best interests of national defense. If such a course would someday become possible, there would be an obvious advantage of again providing additional facilities, depending upon the number received from the military. Indeed, it could be expected that such assignments would provide somewhat better propagation characteristics than UHF, although not as good as the existing band.

On the other hand, we have tried and failed in this regard on a number of occasions and it is foolhardy to expect any relief in the near future.

Even if relief someday became possible it would probably be a number of years before an appropriate offer or exchange could be negotiated and in the meantime the situation would continue to deteriorate.

Obviously, depending upon what the offer might be, an examination might reveal it to be completely unacceptable, and obviously any offer would be in a VHF band not now used for TV. In this event all VHF sets in use would become partially or totally obsolete. In addition, an estimated 8 million receivers equipped to received UHF would become useless.

While it might be probable that propagation characteristics might be somewhat better than the UHF, I think it is being scientifically established that the propagation characteristics in the high VHF are not known to be significantly different than in the low UHF.

In conclusion on this particular topic, any offer would likely be contingent on abandoning entirely the UHF portion of the spectrum, as well as all or a part of existing V space. It is inconceivable to me that any such offer would even closely approximate a channel for channel swap. Thus, we would be giving up 70 channels for something less, and likewise we would be foreclosing a future expansion for users

other than in the broadcast service, which users, by the way, in the years to come will literally dwarf the current requirements.

ALTERNATIVE C

Expanded deintermixture on selective basis.

The Congress in recent weeks has heard a great deal on this subject of deintermixture largely from the proponents of the status quo and particularly on the eight specific markets which the Commission is currently proposing to deintermix. These proponents of the status quo have made extravagant claims about the fact that the deletion of the single existing VHF station would deny service to literally millions of people in the aggregate.

With these claims I must vigorously disagree. I do not think that the Commission has ever had the intention or will ever take an action that will deny service to people. It is true that the dislocations may exchange one service for another but the fact of the matter is that the Commission would provide a conversion period so that all now receiving service would receive an equal number of services immediately with the prospect of greatly expanded services in the immediate future.

The fact of the matter is that we have deintermixed in a number of markets with great success and with practically no disruption by reason of the fact that the existing UHF stations, seeing the prospect of a fair competitive position, have made the investment in improving their facilities that extend the coverage area to where the VHF signal used to go. It is of interest to note that in the cast of most of the remaining UHF operators their finances are so strained that they are working with minimum technical facilities. I know of no UHF tower as tall as 1,000 feet, nor do I know of any UHF station operating with maximum power. These two improvements, plus the new techniques of translators and boosters could insure a continuity of service to all of the people in the markets proposed to be deintermixed.

Our experience in Fresno, Calif., is the best example that I can think of. In that situation there were in operation two UHF stations and one VHF station owned by the Triangle Publications of Philadelphia. In this particular instance the existing VHF operator, to his own financial disadvantage, cooperated with the Commission by agreeing to change his frequency to the UHF band.

As I recall, we permitted him to broadcast on both the UHF and VHF frequencies for a period of 90 days, during which time he could compare the coverage and he found three areas where the U was not giving appropriate coverage. He then went into the communities and with the cooperation of the communities installed a translator, which has provided the service. The V station went off the air and I am not aware of any single complaint. As a matter of fact, since the deintermixture action was taken in this area we have had five new applications for UHF stations because the entrepreneur can now have a chance to compete in this area and to provide to the people of the area a multiplicity of services.

In my considered judgment, the failure to provide deintermixture in the markets under consideration and particularly if the Congress legislates against it will indicate to the UHF operators the fact that they are fighting a losing battle and it would be wise of them to close

their operation. In this event in these areas we will then have a single service to all of these millions of people. In addition to the inherent consideration of monopoly, is this a fair way to treat an important segment of our population?

I subsequently envision in such a situation that to provide a choice of service the community antenna people would move into these areas and provide a variety of services to the people for a fee from $5 to $10 per month. In this contingency I believe you can expect these same operators who are now asking you to preserve their monopoly by denying deintermixture by legislation will be back before you requesting legislation against the community antenna.

ALTERNATIVE D

Shift to all UHF in 5 to 8 years.

This, Mr. Chairman, is my final judgment as to where the FCC should go. Obviously, it would insure the utilization of 70 channels as opposed to the present possibility of 12 channels.

Five to eight years is more than the normal expected life of receivers presently in use, so that disruption to the public would be minimal. I would permit the existing VHF operators to broadcast on both U and V frequencies for this conversion period so that he would have time to find whatever holes or poor service areas this transition might create.

This proposal would certainly insure the implementation of educational stations in many places where only the UHF is available to them.

I further would propose that the existing VFH assignments be vacated by broadcasters and be made available for many other services which are thirsting for expansion and crying for relief before our Commission.

Our 1961 annual report will indicate that the number of stations in the safety and special radio services rose to 770,500 in 1961—an increase of 118,000 stations in this 1-year period, bringing authorized transmitters licensed by our Commission to a total of 2,700,000.

This tremendous growth has been in a very small segment of the spectrum, which is contributing more and more to stacking, congestion, and mutually destructive interference, and we are coming to the end of what we can do with tightening standards and narrowing channels.

The population is literally exploding, industry is expanding, and radio is more and more a tool of industry which reduces unit costs and permits us to compete with world markets where labor costs are but a fraction of ours.

New uses for radio are being discovered every day; that is, medical and biological telemetering, tone actuated point-to-point alarm and control functions, telemetering in hazardous industries, and short-range wireless microphone operations.

In proposing the use of television channels for mobile radio uses, I am not unmindful of the needs of common carriers for more frequency space. The growth of the domestic public land mobile service in certain populous areas has been impeded by the lack of sufficient frequencies to accommodate all the needs for new facilities.

With the approach of November 1, 1963, by which time all 152/158 megacycles facilities will be required to operate on narrower radio channels, numerous stations in this service already have voluntarily converted to narrow band split channel operation in order to make additional channels available immediately. However, no further relief in congested areas is anticipated in the foreseeable future unless new frequencies are to be made available.

Moreover, there appears to be a pressing need for frequencies to accommodate air-to-ground telephone service. Since I recognize that this service when fully implemented would require a wide band exclusive frequency allocation, I propose to restrict the use of safety and special radio services to television channels 2 through 8 and to reserve channels 9 through 13 for possible future use by common carriers. A move of all of television broadcasting to UHF would open these frequencies to a much needed use.

Nonbroadcast services are desperate for space, including State and county goverments, police and fire protection, manufacturers in abundance, farmers, foresters, truckers, railroads, miners, heavy construction, electric and gas utilities, retailers, wholesalers, jobbers, right on down through the whole economy.

Upon an affirmative announcement of a move to all UHF manufacturers would improve the quality of the transmitting and receiving equipment and certainly by equalizing opportunities for competition it would, undoubtedly, foster additional networks and open more and more markets to current film.

To those who would say that the disruption would be so horrible, I ask them how did we convert d.c. current to a.c. current, or the fast-playing phonograph to the long-playing record?

ALTERNATIVE E

Subscription television on UHF only.

I have added this alternative since it seems to be a natural direction if subscription television is going to be a part of our broadcasting system. I do not propose to discuss the merits or demerits since I think it is rather moot as we are awaiting the results of a test being conducted in Hartford, Conn.

ALTERNATIVE F

Legislation for the all-channel receiving set.

Since this is a matter with which the committee is well versed, I can only repeat that I support the legislation because I think it goes down the same road and is compatible with an ultimate conversion to UHF at some future date.

NEW YORK CITY UHF EXPERIMENT

I do not believe I could properly conclude without mentioning this operation which is currently on the air in New York City.

One of the major arguments against the further utilization of UHF has been that it will not work in canyon areas. To explore this argument the Commission several years ago sought and obtained funds to construct a high power UHF station on the Empire State Building,

which is now operating under the management of the city of New York. This station is broadcasting a part of the day—a duplicate of programs from the VHF channels in the city of New York, during which time 11 crews of men are making exhaustive measurements around the city of New York to compare the quality of the signal.

Within the past few weeks we have had some preliminary data analyzed and while we should be careful to qualify it to the extent that the number of measurements thus far taken are too few to be conclusive, it is my personal conclusion that based on our information thus far there is no significant difference in the UHF and VHF signals within a 25-mile radius of the Empire State Building in Manhattan.

We have a mobile truck which is making additional measurements outside the 25-mile radius, and before we conclude we will have information as to the comparative strength of the signal beyond 25 miles. I believe it is expected by engineers that at a point, wherever that might be, the UHF signal will fall off more rapidly than the V. This point I can see and my answer to it is that this loss of coverage could be recaptured by additional stations to serve local needs instead of depending upon a monopoly. The State of New Jersey, for example, has no commercial television station and must depend primarily upon VHF service from stations located in New York and Pennsylvania.

My personal observations on the comparative merit of the U and the V in New York is buttressed considerably by the fact that RCA has been making some measurements on their own with their people from the Princeton Laboratories. There measurements have been limited to the lower two-thirds of Manhattan and their conclusions as reported to us are that while television is inferior in the lower two-thirds of Manhattan there is no significant difference between the V and the U.

In conclusion, I can only say that if we agree that the Kennedy-Nixon debates are in the public interest, why is it not possible to have the same kind of debates for State and local candidates who have a right to gain the ears of the people through this medium which belongs to them?

This can never be with the existing long-range VHF stations since it would not be economically feasible to either provide or sell such time for such a small segment of coverage area. This development in American politics can only be reached through the full utilization of the UHF band.

Appendix

Applicability of any deintermixture moratorium to the Springfield, Ill., Peoria, Bakersfield, and Evansville deintermixture proceedings.

This appendix deals with the applicability of any moratorium on Commission deintermixture action (to all UHF operation) to the deintermixture proceedings in (1) Springfield, Ill. (docket No. 14267), (2) Peoria, Ill. (docket No. 11749), (3) (Bakersfield, Calif. (docket No. 13608), and (4) Evansville, Ind. (docket No. 11757). For reasons developed within, the Commission believes that any such moratorium should be inapplicable to these proceedings.

1. *Springfield, Ill., deintermixture proceeding* (docket No. 14267). On March 1, 1957 the Commission issued an order in the rulemaking proceeding in docket No. 11747, which removed channel 2 from Springfield, Ill., and added it at St. Louis, Mo., and Terre Haute, Ind., and further assigned UHF channels 26 and 36 to Springfield (22 F.C.C. 318). The Commission's order also modified the existing authority of Signal Hill Telecasting Corp., the then licensee of channel 36 in St. Louis, to provide for temporary operation on channel 2. This order was affirmed by the court of appeals (*Sangamon Valley Television Corp.* v. *United States*, 255 F. 2d 191 (C.A.D.C.)), but the Supreme Court remanded the case to the court of appeals for consideration of certain *ex parte* activities which had occurred during the rulemaking proceedings before the Commission (356 U.S. 49). The court of appeals remanded the case to the Commission for a determination of the nature and source of all *ex parte* pleas (269 F. 2d 221). The Commission, after ascertaining such pleas, proposed to give interested parties an opportunity to respond to them but not to comment on matters occurring subsequent to March 1, 1957.

On appeal, the Department of Justice took issue with this latter ruling, urging that the Commission must consider post-1957 facts "if it is to reach a proper rulemaking decision as to where the VHF channel 2 should be allocated for the future" (brief, p. 8). The Commission, in its brief, pointed out that "consideration of subsequent events might well have to include existing service to the public in St. Louis * * *" (p. 18). The court agreed with the Department and ordered the Commission "to conduct an entirely new proceeding," based on the facts as they now exist; it further stated that the existing service on channel 2 in St. Louis may be continued by the Commission during this new proceeding (294 F. 2d 742). On September 7, 1961 the Commission instituted the new proceeding (docket 14267).

2. *Peoria, Ill., deintermixture case* (docket No. 11749). The Commission in a report and order issued March 1, 1957, deintermixed the Peoria area, substituting a UHF channel for channel 8 which was reassigned to the Davenport-Rock Island-Moline metropolitan area in order to afford "a third VHF outlet in this major market" (docket

No. 11749, 22 F.C.C. 342).[1] On appeal, the court of appeals affirmed the Commission's order (*WIRL Television Co.* v. *United States*, 253 F. 2d 863 (C.A.D.C.); the case was, however, subsequently remanded to the Commission, not because of any error or because of *ex parte* factors, but because the Commission's decision was geared, to some extent, to the *Springfield* deintermixture proceeding [2] and accordingly might be affected by a different decision in that proceeding. Since the Commission is to reconsider the *Springfield* matter, the rule-making with respect to Peoria also was remanded to the Commission, so that it could be reconsidered, if necessary, in the light of the new *Springfield* decision. See *WIRL Television Co.* v. *United States*, 274 F. 2d 83 (C.A.D.C.).

We have set out this lengthy history to show that the *Springfield, Ill.* deintermixture proceeding does not stand on the same footing as the eight deintermixture proceedings initiated last July. If a general moratorium prevents deintermixture in these proceedings, it rightly or wrongly maintains the status quo in these areas. But a moratorium precluding deintermixture in Springfield would, as a practical matter, upset the status quo. For, as the Court recognized, the facts are that since 1957 Springfield has been all-UHF and channel 2 has been serving the St. Louis area. Without any consideration of the merits of the matter, the moratorium thus would automatically withdraw channel 2 from service in St. Louis (and from assignment to Terre Haute where, however, it has been the subject of a comparative hearing) and call for VHF operation in Springfield. We think that such an automatic application of a general moratorium is unsound and that the matter rather should be left to the Commission's judgment. And see section 402(h), Communications Act. It may be that in spite of the dislocation we have described, the Commission might conclude in docket 14267 that the public interest would not be served by ordering deintermixture of Springfield. But certainly that decision is one calling for a judgment on the basis of all the public interest factors—and not for automatic application of any general deintermixture moratorium. This conclusion is buttressed by the domino effect of a moratorium precluding deintermixture of Springfield on the Peoria, Ill., deintermixture case, to which we now turn.

This means that if a general moratorium causes the Commission to reject deintermixture of Springfield, the *Peoria* deintermixture action would have to be reconsidered in the light of this new factor. But the same moratorium would prevent the Commission from reevaluating and making a new judgment as to whether Peoria should be deintermixed. The actual status quo in Peoria would thus be disturbed without any consideration of the merits of the case. It may be that it should be so disturbed. But it may also be that the Commission would not regard a reversal of the Springfield picture—referred to only in a footnote in the Commission's *Peoria* decision (see footnote 2,

[1] This channel assignment to Davenport-Rock Island-Moline has been the subject of a comparative hearing, which is not yet completed; instructions as to the final decision were announced on June 29, 1961, *Community Telecasting Corp.*, docket No. 12501.

[2] In a footnote in the *Peoria* report, the Commission stated (22 F.C.C. at 352, note 15): "Our action herein, moreover, comports with our decision in the Springfield deintermixture proceeding (docket No. 11747). In that case we have concluded that the public interest would be served by deleting channel 2 from Springfield. A station on this frequency in Springfield would have provided VHF service to parts of the service areas of the UHF stations in Peoria; and conversely a station on channel 8 in Peoria would provide VHF service to portions of the area that will be served by UHF stations in the Springfield-Decatur area, which the Commission believes should be all-UHF."

supra)—as requiring a different result. Here again, the matter is obviously one for judgment—not rigidity.

3. *Bakersfield, California* (docket No. 13608). On March 27, 1961, the Commission issued an order deintermixing Bakersfield by substituting UHF 23 channel for channel 10, effective December 1, 1962, or such earlier date as station KERO–TV may cease operation on channel 10 at Bakersfield. 21 Pike & Fischer, R.R. 1549. This is *final* Commission action, with only "formal codification to be accomplished by subsequent order." 21 Pike & Fischer, R.R. 1573. As such, it is appealable and now pending before the court of appeals. *Transcontinent Television Corp.* v. *U.S.*, case No. 16541, C.A.D.C. Obviously, any moratorium on deintermixture would and should be inapplicable to this final Commission action.

If, however, the case were remanded to the Commission for any reason, the question would arise whether Commission reconsideration should be precluded by a general moratorium. We believe that it should not. For, reconsideration in such circumstances stands on a different ground than a new proposal for deintermixture in some area. (Cf. sec. 402(h) of the act.) Even more important, a moratorium affecting Bakersfield would leave Commission action in this general area (the San Joaquin Valley) in the state of being half complete, half incomplete, and would have seriously adverse consequences on the development of television in the San Joaquin Valley and particularly in the Fresno area. In Fresno, deintermixture action by the Commission is complete, and Fresno station KFRE–TV has shifted from operation on VHF channel 12 to UHF operation (see FCC 60–814, 60–279). One of the important aims in the *Bakersfield* case was to complement the Fresno action. As the Commission stated (21 Pike & Fisher, R.R. at pp. 1554–1556):

> 7. The potential for the growth and development of multiple effective local outlets and services in the San Joaquin Valley would be much greater if all television assignments at Bakersville were in the UHF band. With Bakersfield and Fresno, the two largest expanding population centers of the valley located about 105 miles from each other, and with their trading and market areas extending into the valley between them, where also are located a number of smaller cities where the chances for the establishment of local television outlets are promising, it is inevitable, under the favorable terrain and propagation conditions in the valley, that there is and will be an overlapping of services and a sharing of a common audience by all stations operating at Fresno and Bakersfield or in cities between them. It has been demonstrated that the relatively flat valley floor presents unusually favorable conditions for propagation of television signals. Marietta itself pointed out in comments filed in docket No. 11759 that the "unque character of the extremely flat and quite treeless San Joaquin Valley, which permits signals to be rolled down the corridor from Bakersfield toward Fresno and from Fresno toward Bakersfield in the manner of a bowling ball, exceeding substantially the normal propagation distances in other areas, is a phenomenon which cannot be ignored." By virtue of these circumstances, it is essential, we believe, that we make conditions conducive throughout the valley for the growth and successful operation of local outlets by providing an equal opportunity for all valley stations to compete effectively with compatible facilities.
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> 10. With our action removing VHF channel 12 from Fresno and shifting station KFRE–TV on that channel to UHF operation, all television assignments and stations in the valley are now in the UHF band with the exception of station KERO–TV on channel 10 at Bakersfield. At the present time only three stations are operating at Fresno and three at Bakersfield, but there is demand and promise that additional outlets will soon be established at Fresno, and at Tulare,

Visalia, and Hanford, which are located in the valley between Fresno and Bakersfield. [Footnote omitted.] The predicted grade B signal of the VHF channel 10 station at Bakersfield (KERO–TV) extends well beyond Tulare, Visalia, and Hanford where local UHF stations are now contemplated, penetrates the service areas of the Fresno UHF stations, and reaches to within 23 miles of Fresno. There can be no doubt, however, that under the excellent propagation conditions in the valley, its signal penetrates even farther north in the valley. The Nielsen coverage survey for the spring of 1958 indicates that station KERO–TV at Bakersfield reaches and is listened to in homes in Madera County, which is north of Fresno County and principally served by Fresno stations. The 1960 American Research Bureau, Inc., television coverage study of California counties and stations indicates that about 96 percent of the television homes in both Tulare and Kings Counties (Tulare and Visalia are in Tulare County and Hanford in Kings County) and about 58 percent of the TV homes in Fresno County are able to receive station KERO–TV and that station KERO–TV's net weekly circulation (number of TV homes viewing station KERO–TV at least once a week) in Tulare County is about 93 percent in Kings County about 83 percent and in Fresno County about 30 percent.

11. Although our removal of the single VHF outlet at Fresno puts all Fresno stations on a comparable competitive footing which we believe will increase the potential for the growth of healthy competitive services in the Fresno area, we cannot agree with Marietta that deintermixture of the Fresno market can be fully effective notwithstanding its VHF station at Bakersfield. With a VHF outlet at Fresno no longer dominating the Fresno market, there is considerable merit, we believe, to the claim of proponents for UHF-deintermixture of Bakersfield that station KERO–TV, as the only VHF station in the valley, would be in a position of conspicuous and unjustifiable dominance over all the competing UHF stations in the valley. This factor and the extent to which station KERO–TV's signal now penetrates beyond cities between Bakersfield and Fresno where the establishment of additional local UHF outlets is the most promising and into the service areas of the Fresno stations convincingly indicate that the presence of this VHF station in the adjacent Bakersfield market constitutes a significant deterrent to effective and comparable UHF competition in the Fresno market area and to the establishment of effective and beneficial new services, particularly in the smaller cities of the valley. The deterrent would be compounded if Bakersfield were made principally all VHF by the addition of two more VHF outlets, as Marietta suggests, and three Bakersfield VHF stations were to provide service in this now all-UHF area. Complete deintermixture of the entire San Joaquin Valley to UHF is, in our judgment, required for full development and expansion of effective competitive television service throughout the valley.

On this ground also, therefore, Bakersfield should not come within any general deintermixture moratorium but rather should be left to Commission judgment, in the event that reconsideration is called for at some future date.

4. *The Evansville deintermixture proceeding* (docket No. 11757).—On March 1, 1957, the Commission issued a report stating its "judgment that amendment of the table of assignments for television broadcast stations (sec. 3.66(b) of the Commission's rules) by shifting channel 7 from Evansville, Ind., to Louisville, Ky.; assigning channel 31 to Evansville; substituting channel 78 for channel 31 in Tell City, Ind.; shifting channel 9 from Hatfield, Ind., to Evansville where the channel is to be reserved for noncommercial educational use; and by unreserving channel 56 and shifting it from Evansville to Owensboro, Ky., would promote the public interest, convenience and necessity." The Commission effected the changes as to channel 9 but not those involving channel 7. Because there was an outstanding authorization for operation of station WTVW on channel 7 in Evansville, the Commission instituted show cause proceedings to modify station WTVW's permit to specify operation on channel 31.

The Commission's action shifting channel 9 from Hatfield to Evansville (for noncommercial educational use) was sustained upon review in court. *Owensboro-on-the-Air, Inc.* v. *U.S.*, 262 F. 2d 702 (C.A.D.C.). As to the show cause proceeding, the examiner on July 20, 1961, issued an initial decision recommending that channel 7 be deleted from Evansville and reassigned to Louisville and that WVTW's permit be modified to specify operation on UHF channel 31 (FCC 61D–113). Oral argument on the exceptions to the initial decision will be heard by the Commission on March 29.

Again, we think it apparent that no general moratorium should be applicable to the Evansville area situation. Half the Commission's action in this area is final (that is, shifting channel 9 to noncommercial operation); the other half—whether channel 7 should be shifted to Louisville to complete the deintermixture of the area and provide Louisville with a third VHF facility—is nearing final decision after a lengthy adjudicatory proceeding. Clearly the judgment as to whether the public interest would be served by such action should be made by the Commission upon the basis of the voluminous adjudicatory record compiled—and not by automatic application of a general moratorium.

Significantly, Senator Capehart, who opposed deintermixture of Evansville in testimony given before the examiner (par. 95, Init. Dec., FCC 61D–113), concurs in this conclusion. For, while supporting the provision of H.R. 9267 (the Roberts bill) precluding Commission deintermixture, he further stated:

> So that there can be no misunderstanding, I do not take this position in connection with any case that is under adjudication before the FCC. Specifically, my views do not apply to the situation in Evansville where channel 7 has been earmarked for a move for a very long time. The legislative decision in this case was made some years ago. What concerns me is future legislation, or rulemaking, decisions. I think it is proper for me to express my views on such matters, while I should be reluctant to do so as to cases under adjudication. (Statement before Subcommittee on Communications, Senate Commerce Committee.)

The CHAIRMAN. Now, did you indicate that Mr. Lee desired to come for further testimony tomorrow?

Mr. MINOW. It was my understanding that he would be available, and that if the committee wanted to hear from him—excuse me—it would be the day after tomorrow. If the committee wanted to hear from him, he would be available and be pleased to be here.

The CHAIRMAN. Well, in view of the fact that we had the Commission here today, we have his statement, we have other witnesses tomorrow and Thursday—suppose he will remain on call in case the committee wants him.

Mr. MINOW. Fine, thank you.

The CHAIRMAN. Again, thank you very much, and the other members of the Commission, and members of the staff. We appreciate your testimony on this subject.

Mr. MINOW. Mr. Chairman, we thank you for the very patient hearing we have had. We have been very glad to have been here today.

The CHAIRMAN. Thank you.

The committee will recess until 10 o'clock in the morning.

(Whereupon, at 5:20 p.m., the committee recessed, to reconvene at 10 a.m., Wednesday, March 7, 1962.)

ALL-CHANNEL TELEVISION RECEIVERS AND DEINTERMIXTURE

WEDNESDAY, MARCH 7, 1962

HOUSE OF REPRESENTATIVES,
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.

The committee met, pursuant to recess, at 10 a.m., in room 1334, New House Office Building, Hon. Oren Harris (chairman of the committee) presiding.

The CHAIRMAN. The committee will come to order.

As we resume hearings this morning on various bills on all-channel receiving sets for television broadcasting and deintermixture, we are especially glad to extend a welcome to the chief executive of the great State of Connecticut, the Honorable John Dempsey.

Governor, we are very glad to have you with us this morning. We realize that you are a busy person, with the tremendous responsibilities that you have a chief executive of your State. Consequently, we will receive your testimony at this time.

It is my understanding that our distinguished colleague from your State, a member of this committee, Mr. Sibal, is unable to be here because of the weather in your fine State. I assume that is one of the excuses that will be acceptable. But I believe in his absence, he has asked another colleague of ours on this committee, Mr. Dominick, to express to you some of the thoughts he intended to express.

Mr. DOMINICK. Governor, as an ex-resident of Connecticut, and a good friend of Congressman Sibal, he called today and said to express his real regret that he was not down here on the committee in order to be able to welcome you to the committee and to say that all of us are going to be listening to your testimony with great interest, because we know how important this bill is to the State of Connecticut.

So on behalf of Congressman Sibal, and on behalf of myself, as an ex-resident, we certainly want to welcome you to the committee.

STATEMENT OF HON. JOHN DEMPSEY, GOVERNOR OF THE STATE OF CONNECTICUT

Governor DEMPSEY. Thank you very much, Mr. Harris, for the opportunity to testify here today. Thank you, Mr. Dominick, for bringing the greetings of an old friend of mine, Ab Sibal. Ab and I served in the Connecticut State Senate together.

My name is John Dempsey. I am appearing before this committee today as Governor of Connecticut and as chairman of the Governor's committee for the retention of channel 3 in the State of Connecticut.

My purpose is to support the enactment of legislation which would

maintain the present status of channel 3 at Hartford and at the same time would assist the expansion of telecasting by enabling the Federal Communications Commission to prescribe standards requiring the manufacture of all-channel television receivers which move in interstate or foreign commerce. Specifically, I support H.R. 9267 and several identical bills pending before your committee.

Channel 3 is the only VHF channel assigned by the Commission to Hartford, the capital of Connecticut, the largest city in our State and the center of government, business, and activities of statewide interest.

The organization operating a station on channel 3 at Hartford is dedicated to service in the public interest. For almost 40 years it has given the people of Connecticut on its radio station the finest possible broadcast programs. It has achieved an equally splendid record of performance on its television station. I consider it a duty and privilege to help preserve for Connecticut those institutions and organizations which have contributed substantially to the State's growth and are essential to its well-being. Channel 3 is such an organization. It has become an essential part of the lives of all of Connecticut's citizens.

I was deeply disturbed, therefore, when I learned last summer that the Federal Communications Commission was again proposing to take channel 3 away from Connecticut.

Knowing from past FCC proceedings involving the same question that the people overwhelmingly objected to the removal of channel 3, I determined then that the time had come to present the feelings and convictions of Connecticut citizens to the FCC in as forceful a manner as possible. People from all parts of Connecticut besieged me. Accordingly, I asked the leaders of Connecticut's governmental, educational, agricultural, labor, religious, civic, business, and other organizations to join me in an effort to retrain for Connecticut the services of channel 3 which are so compellingly required to serve the needs of our citizens.

I knew from personal observations and from my travels throughout the State, both as Governor and as mayor of a Connecticut city, that vast numbers of our people would have no television service at all if channel 3 were not retained as it is at present. I extended invitations to approximately 125 leaders of various organizations in Connecticut to serve with me on a committee to preserve channel 3 for our State. The response was overwhelmingly favorable.

Upon learning of the formation of the committee, many additional persons expressly requested the opportunity to serve on the committee. I received scores of letters from others asking how they could help in preserving channel 3 for Connecticut.

The entire Connecticut congressional delegation was the first group to accept membership. They were joined by the Lieutenant Governor; the speaker of the house; the majority and minority leaders of the State senate and the house of representatives, the mayors and chief executive officers of many communities, large and small, and numerous other governmental officials.

In the field of education, the committee includes the State commissioner of education; the president and chairman of the board of trustees of the University of Connecticut; the executive director of the

Connecticut Educational Association, and superintendents and headmasters of several Connecticut schools.

Also on the committee are representatives of important agricultural, labor, religious, civic, business, and military organizations. Attached to my comments is a list of the membership of the committee.

While the committee was being organized, I asked the Connecticut congressional delegation to meet with me in Washington to discuss this grave and important problem. It was determined that positive action was imperative to impress upon the Commission the seriousness of its proposed action and to convince the Commission that it was contrary to the best interest of the people to delete channel 3 from its present operation.

The Governor's committee for the retention of channel 3 met on September 18, 1961, in the hall of the house of representatives at the State Capitol in Hartford. After a full discussion of the problem, a resolution was unanimously adopted opposing the deletion from Hartford of channel 3 and authorizing me as chairman of the committee to file formal comments with the Federal Communications Commission, Washington, urging the Commission not to adopt the proposed allocation change affecting channel 3. A copy of the resolution is also attached.

I did file such comments with the Commission pointing out the reasons why the FCC's proposal regarding channel 3 was seriously prejudicial to the interests of the people of Connecticut and to the public interest at large.

The strong protest of the people of Connecticut to the proposal for the deletion of channel 3 from Hartford has been made crystal clear by the thousands of letters filed with the Federal Communications Commission objecting to the FCC proposal to change the present status of channel 3. I have personally received countless letters voicing the same objections.

At last count, well over 250 formal resolutions had been adopted by the governing bodies of Connecticut cities and towns and statewide or regional groups objecting to the Commission's action. Resolutions were adopted by 50 cities and towns in Connecticut, by 23 statewide organizations in Connecticut and by 181 Connecticut local and regional groups expressing their strong feelings that channel 3 should be retained in Hartford. These resolutions came primarily from cities, towns, and organizations who have members residing in areas which must rely upon channel 3 for any clear television reception.

In large parts of Connecticut the terrain is broken up into many valleys, hills, and forests. The only way that hundreds of thousands of Connecticut citizens can get any television service of a clear nature is by tuning in the signals of channel 3.

Since Hartford is the capital of Connecticut, it is natural that news of statewide and regional activities of essential interest to all of our citizens originate from that city. The people of our State are entitled to receive news originating in Hartford concerning the activities of governmental agencies and civic institutions.

Channel 3 provides an excellent program service arranged to meet the particular needs of Connecticut's residents. It furnishes detailed weather reports, including news of flood, hurricane and snow conditions, geared to conditions in our own State. During the disasters

of 1955, when the floods ravaged our State, it was necessary for me, as mayor of my city to go to another State in order to report to the people of my community and appeal for help for my State on television. This would not happen today thanks to channel 3's coverage.

The station on the channel broadcasts the results, not only of national but also of local and State elections.

It provides a television platform for the airing of views of Connecticut candidates for local, statewide, and national office. It telecasts news items about events originating in Connecticut's numerous cities, counties, and towns, including news of community and civic activities.

It brings to Connecticut viewers regular reports on legislation pending before the Connecticut Legislature and also reports from the Connecticut congressional delegation in Washington on a regular basis.

The station on channel 3 has a great record of cooperation with our own State and local organizations. It has the technical know-how, the physical facilities, the personnel, and above all the desire to provide a television service of unique interest.

One of the proposals of the FCC is to move channel 3 to Providence, R.I. It seems clear to me, and I think it is equally clear to any reasonable person, that it would not be fair or equitable to move channel 3 to Providence which already has two VHF statiton on the air, and will soon receive service from a third. Thus Providence would be served by four VHF stations, with Hartford having none, if channel 3 were reallocated to Rhode Island. Gentlemen, I cannot impress on you enough, Connecticut needs channel 3.

The FCC has had before it the question of the deletion of channel 3 from Hartford on several different occasions. Each time the decision has resulted in the retention of this channel in the capital city of Connecticut. The facts on which those decisions were based have not changed. In fact, they have been reinforced and fortified by the outpouring of protests from the citizens of the State.

Upon appeal from the Commission's actions in the past, the court has upheld the FCC's decision to retain the channel at Hartford. The issue has been before the Supreme Court of the United States. That Court refused to upset the Commission's prior determination that the public interest best would be served by retaining the channel at Hartford.

Gentleman, it is my sincere hope that because of the importance of this to my State, the Congress, through the legislation now before you, will settle this problem once and for all and assure not only the retention of the present television service in my State but the expansion of the service in the future.

I therefore reiterate my support of legislation which would require the manufacture of all-channel receiving sets with the provision that channel 3 at Hartford be retained.

I am grateful to the chairman and members of this committee for your courtesy and for the opportunity of presenting to you my views on proposed legislation of such vital importance to all of the people of our State.

Again, Mr. Chairman, I am grateful to you and the members of your committee, and in turn I hope some day that you will come up to Connecticut and pay us a visit.

The CHAIRMAN. Governor, thank you very much. I observe that you have attachments to your statement that you would like to be included with your statement.

Governor DEMPSEY. Yes, I do, Mr. Chairman.

The CHAIRMAN. They will be included at this point in the record.

(The attachments referred to follow:)

RESOLUTION OF GOVERNOR'S COMMITTEE FOR CHANNEL 3

Whereas the Federal Communications Commission issued on August 3, 1961, in docket 14241 a notice of proposed rulemaking inviting comments from interested persons on a proposal to delete channel 3 from its present use at Hartford, Conn., and to substitute therefor a UHF frequency; and

Whereas the implementation of the proposal would be seriously prejudicial and greatly injurious to a vast number of Connecticut residents who rely on channel 3 for their only clear television service and to an additional very large number of Connecticut citizens who rely on the same station for their ability to receive a choice of television signals; and

Whereas channel 3 has substantially greater ability to render a clear television signal over wide areas in the hilly and wooded regions of New England than does a UHF frequency; and

Whereas WTIC–TV has utilized channel 3 to render an excellent television service in the fields of education, religion, news, weather forecasting, agriculture, government, civic affairs, and entertainment of particular need and interest to residents and organizations of Connecticut; and

Whereas channel 3 is the only VHF channel allocated to Hartford, the capital of Connecticut and the center of governmental, business, and civic life; and

Whereas the deletion of channel 3 from its present use at Hartford would be inequitable, unjust, and discriminatory to hundreds of thousands of Connecticut residents: Now, therefore, be it

Resolved, That the Honorable John N. Dempsey, Governor of the State of Connecticut, is directed to file comments on behalf of the Governor's Committee for Channel 3 with the Federal Communications Commission urging the Commission not to make the allocation change proposed in docket 14241, to make this resolution a part of such comments, and to take whatever steps are appropriate and fitting to oppose the aforesaid proposal, including participation in oral argument before the Commission, if such is held.

This is to certify that the foregoing resolution was unanimously approved by the Governor's Committee for Channel 3 at a duly called meeting held on September 18, 1961, in the Capitol Building in Hartford, Conn.

GOVERNOR'S COMMITTEE FOR CHANNEL 3

Hon. Prescott Bush,
Senate Office Building,
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The CHAIRMAN. On behalf of the committee, I want to thank you for your very forceful statement. Obviously you have made it very clear as to the importance of this matter in your State, not only from the broadcast angle, public service programs, but also included with that the importance of the political phase as well.

You certainly have pointed out the obvious feeling of the people of Connecticut regarding this matter.

I will recognize the members of the committee now, and I would also like to call attention of the committee to the fact that we would like your cooperation this morning, in that we have a good many witnesses here that we hope to get to. I hope that your questions will be brief.

Mr. Mack, any questions?

Mr. MACK. I just wanted to commend the Governor for his very excellent statement. I can well understand the problem and the desire to receive Connecticut news, because we have not been able to get our VHF station on the air in Springfield, Ill. I am forced to listen to the programs from Missouri. I would much prefer to listen to the activities of my own State.

Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Friedel.

Mr. FRIEDEL. Governor, I just want to commend you for your very forceful statement.

Governor DEMPSEY. Thank you very much.

The CHAIRMAN. Mr. Younger.

Mr. YOUNGER. Just one question.

Governor, there are two phases of this legislation. One is the prohibition against the Commission on deintermixture. The other is a legislation concerning the all-channel set. In which order do you think that legislation should be taken up?

Governor DEMPSEY. I am not sure, Mr. Congressman. I am sure the committee, whose duty it is to pass on this, will present it in the right order. My interest here today, sir, and I cannot make it strong enough to you, is to leave this channel, which is the heart of my State, no matter what you come up with—I pray God you will leave this alone. I am grateful for the comments of these people here today who understand this problem. As to what order, sir, I have no comment.

Mr. YOUNGER. Well, it is very apparent your order of procedure is to stop the Commission from the deintermixture order.

Governor DEMPSEY. As a member of a legislative committee in my home State, I always avoided the word "stop." I like the word "go." I want progress in my State. When I say go, I mean keep channel 3 in Connecticut. Anything that will keep channel 3 in Connecticut, sir, I will be for, believe me.

Mr. YOUNGER. That is all.

The CHAIRMAN. Mr. Kornegay.

Mr. KORNEGAY. I would just like to say that we welcome you, Governor. We are glad to have you with us. I commend you on a very fine, forthright statement. I might say I suspect you are not without friends in this group.

Governor DEMPSEY. Thank you very much.

The CHAIRMAN. Mr. Thomson.

Mr. THOMSON. Mr. Chairman, I just want to commend the Governor of Connecticut for his statement, and make the observation that I wish we had a Governor in the State of Wisconsin who had the courage to come before a committee and protect the people of Wisconsin, rather than coming to Washington to talk to the ADA.

The CHAIRMAN. Mr. Dominick.

Mr. DOMINICK. Mr. Chairman—Governor, how many UHF stations are there in Hartford?

Governor DEMPSEY. There are two in Hartford—30 and 18.

Mr. DOMINICK. And then there is a spot where UHF does not cover, and channel 3 does.

Governor DEMPSEY. That is correct—for instance, the part of the State that I live in—the part of the State where we had this terrible disaster, I feel the most. We have no clear television picture at all. When Mr. Mack was explaining to you, I could have said to him that that was exactly our picture in eastern Connecticut. In order to get any news, we had to tune in to Rhode Island or Massachusetts. Thank God we can now tune in channel 3 in Connecticut. If you take channel 3 away, or it is taken away from us, then we in eastern Connecticut have no Connecticut news at all.

Mr. DOMINICK. Now, in the area where you only receive channel 3, what advantage is there to the citizens living in that area of having all-channel receivers?

Governor DEMPSEY. There might be an advantage. I might just point out to you again the advantage of receiving channel 3, as I think I have pointed it out to you this morning. I would say here again—I do not know what the technical answer is to this, how many channels, or all channel. I hope that this group will consider legislation that will keep and give us channel 3. That is all I would ask.

Mr. DOMINICK. I have nothing further.

The CHAIRMAN. Governor, thank you very much for your appearance here. As a southerner, I am always glad to listen to the story of a Connecticut Yankee.

Governor DEMPSEY. Mr. Harris, may I say to the members of your committe and to yourself, you make my trip very worth while. Perhaps I can come back and see you again.

The CHAIRMAN. Thank you. We will be glad to see you at any time

Our next witness will be Dr. Frank Stanton, president of the Columbia Broadcasting System.

Dr. Stanton, we are again glad to welcome you to the committee. With your long experience in the broadcasting industry, we are glad to have your testimony on this subject.

STATEMENT OF FRANK STANTON, PRESIDENT, COLUMBIA BROADCASTING SYSTEM, INC.

Mr. STANTON. Thank you, Mr. Chairman.

Mr. Chairman and members of the committee, I am Frank Stanton, president of Columbia Broadcasting System, Inc. I appreciate the opportunity of appearing before you to support legislation which

would require the manufacture of only all-channel television receivers and which would prevent the frustration, through selective or widespread deintermixture of UHF and VHF channels, of the goal of all-channel receiver legislation.

Several bills and resolutions are pending before your committee which deal, in whole or in part, with these two aspects of the proposed legislation.

H.R. 8031 would authorize the Federal Communications Commission to prescribe minimum performance capabilities for television receivers.

H.R. 9267, H.R. 9277, H.R. 9291, H.R. 9293, and H.R. 9322 would prohibit the Commission from deleting the assignment of any VHF channel made to any community on or before September 1, 1961, for the purpose of having all commercial and educational television stations in that community operate on frequencies outside of the VHF band. In addition, these five bills would limit the Commission to prescribing only those minimum performance capabilities appropriate to the requirement that future receivers be able to receive all channels.

H.R. 9349 would prohibit the Commission, in allocating VHF and UHF television channels, from giving any unreasonable preference to any particular municipality or area or from subjecting any municipality or area to unreasonable prejudice.

H. Res. 450 and H. Res. 457 state the sense of the House of Representatives against the Commission requiring a VHF television station to shift to a UHF frequency until the Commission has completed its New York UHF experiment and the submission of a full report as to the results of that study.

H. Res. 469 expresses the sense of the House of Representatives that the Commission should not require a station now operating on a VHF channel to move to a UHF channel.

I should like to explain, first, the basis of our position on the proposed legislation. I will then comment briefly on the various bills.

The sixth report and order of the Commission (1952) established the basic allocation system for television broadcasting. It is the master plan which has guided the television industry in this country for nearly a decade. It was hoped that under the plan the larger and more effective use of television in the public interest would be encouraged.

Basic to that hope was the belief of the Commission that the intermixture of VHF and UHF channels was the solution to the allocations problem with which it had been struggling since the inception of commercial television after World War II. The Commission was guided in its establishment of the allocations plan by its determination to lay the foundation for the development of a nationwide, competitive television system meeting certain objectives, which it has summarized as (*a*) at least one service to all areas; (*b*) at least one station in the largest possible number of communities; and (*c*) multiple service in as many communities and areas as possible to provide adequate program choice and to encourage competition.

But in the years following the issuance of the sixth report and order it has become clear that although the first objective—at least one service to all areas—has been largely met, fulfillment of the second objective—one station in the largest possible number of communities—

and of the third objective—multiple, competitive service to communities or areas—has lagged behind.

One of the root problems has been receiver incompatibility, which is largely responsible for the retarded development of the UHF channels. The VHF–UHF allocation plan provided for 683 VHF assignments on the 12 VHF channels and 1,546 UHF assignments on the 70 UHF channels. But as of January 1962, while 458 commercial VHF stations and 44 educational VHF stations were on the air, only 85 commercial UHF stations and 18 educational UHF stations were on the air. Only 6 percent of the 6,178,000 television sets manufactured during 1961 left the factory equipped to receive UHF signals. It has been estimated that as of January 1, 1960, only 7.8 percent of the total number of television homes were equipped to receive a UHF signal.

During the decade following the sixth report and order. CBS has consistently supported proposals, and indeed has advanced proposals, to increase the number of truly competing stations where the reallocation would not adversely affect existing service.

In 1955 we presented two plans to the Commission. One was based on the use of the existing VHF–UHF spectrum space and the other presumed the addition of three VHF channels. Both plans were aimed primarily at increasing competition in the top 100 television markets, while at the same time avoiding any significant reduction of existing service or injury to existing television stations.

In subsequent FCC allocation proceedings, our basic position with respect to the need for increased competitive service has not changed.

The regulatory scheme provided by the Congress in 1927, and again in 1934, established commercial broadcasting as a mass medium of communications, operating as but one part of the whole society of this Nation, under a system of private competitive enterprise, and supported entirely by advertising revenues. It is the third element—private competitive enterprise—with which we are concerned today.

Within the framework provided by this element of the regulatory scheme, the most effective system of electronic communications throughout the entire world has been established and has flourished. But we cannot rest here. We must, and we will, continue to move ahead under the goad of increased competition.

Our support for measures directed toward the opportunity for greater entry into broadcasting has been based upon the fundamental belief that improvement in programing can best and most effectively be maintained through increased competition in the marketplace of programing.

We reject the concept that a Gresham's Law will set in which, with increased competition, will inexorably rule that lower quality programing will drive out higher quality. There may be temporary setbacks with increased competition but, as I have had occasion recently to state, one of the penalties of a free economy—as of a democratic society—is that we have frequently to put up with short-term disadvantages in order to achieve long-term gains. We bottom our faith on the ultimate ability of the people to distinguish between the good and the bad.

In supporting legislation which would afford greater opportunity for entry into broadcasting, we have not ignored the need for increased

use of television for noncommercial educational purposes. CBS has supported legislation which would provide the seed money for construction of educational stations. Over the years we have made dircet monetary and property contributions to educational television stations.

The National Association of Educational Broadcasters in a recent survey of educational station needs found that a total of at least 1,197 channel assignments would be required to serve the educational television needs throughout the country. There can be no hope of even approaching fulfillment of these needs without the full utilization of the existing UHF and VHF spectrum space.

In considering legislation requiring the manufacture of only all-channel receivers, we must recognize that television is a total system, embracing both UHF and VHF bands of the spectrum. A television broadcast system comprising the 70 UHF channels as well as the 12 VHF channels remains our goal.

As the Commisson advised the Congress in February 1961 in its justification for the proposed legislation, full utilization of the system requires that sets be able to receive signals transmitted in all parts of the spectrum assigned to television.

Proposals have been made for selective and wide-area deintermixture of the UHF and VHF channels. These proposals have been made primarily due to the inability of existing receivers to pick up both the UHF and VHF bands. In attempting to meet this problem, deintermixture would serve little purpose in the face of the proposed legislation which has as its sole purpose the elimination of receiver incompatibility.

The Commission itself has recognized the limitations of deintermixture. In April 1959 it advised the Senate Committee on Interstate and Foreign Commerce that deintermixture limited to selected communities would not provide the needed stimulus for future UHF expansion, and that area deintermixture would involve large-scale disruption to the public and introduce inequities and insufficiencies in the distribution of station facilities among the separate communities and States.

Only 2 weeks ago when the Chairman of the Commission testified before the Senate Subcommittee on Communications, the Commission reiterated its view that deintermixture offered no permanent solution to the full utlization of the spectrum space allocated to television.

We believe it would be a constructive step for the Congress to indicate that it is in the national interest not to deintermix the UHF and VHF channels. Further, it seems to us it would be appropriate for Congress to indicate that the allocation of operating VHF channels should not be disturbed by deletion or by substitution of UHF channels, lest the service be substantially reduced.

There is no assurance that the passage of the proposed legislation will in itself result in the full utilization of this system.[1]

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[1] There is little doubt that UHF channels, in the present state of the art, have several disadvantages. Although there may be disagreement as to the quantitative measure of these disadvantages, there is fairly good agreement on several basic points:

(1) Under average conditions experience demonstrates that a UHF station does not serve as large an area as a VHF station.

(2) Within the area served, a UHF station generally has more "shadowed" (weak signal) locations than a VHF station.

(3) In terms of homes served (as distinguished from geographical area) a UHF station may be able to reach almost as many homes in some markets as does a VHF station. In

To bring that about, it is necessary to undertake a technical offensive on several fronts. This offensive would involve the Commission, the broadcasters, research laboratories, and the manufacturers of transmitters and receivers. It will require a constructive, patient, and confident attitude on the part of all of us. And it will not be accomplished overnight. But we believe that the manufacture and sale of only all-channel receivers is at this time an essential first step toward the ultimate realization of our goal.[2]

I should now like to turn to the bills presently before this committee. As I have already stated, they are designed in general either to require the manufacture of all-channel television receivers or to preclude selective or widespread deintermixture, or both.

As to the all-channel requirement, it seems to us that the provisions of H.R. 9267 and the others which follow its language are preferable to H.R. 8031. As we read section 1 of H.R. 8031, it would authorize the Commission to prescribe minimum performance capabilities for television receivers unrelated to their ability to receive all channels allocated by the Commission to television broadcasting. Thus, a minimum performance capability might relate to fidelity of sound, or to size of picture tube, or to picture brightness.

H.R. 9267 and the comparable bills, on the other hand, limit the authority granted to the Commission solely to the achievement of the goal stated by it in proposing the bill. The performance capability which the Commission may prescribe must have a bearing on the ability of the receiver effectively to receive both VHF and UHF signals. There appears to be no reason for the Government to go beyond this and insist on broader minimum performance capabilities.

The bills and resolutions before you also deal with selective or widespread deintermixture in varying ways and degrees. It seems to us that none of them is completely satisfactory, either in protecting against frustration of the goal at which the all-channel receiver legislation is aimed, or in reserving to the Commission as much flexibility as possible in order to enable it to deal with allocation problems.

As an alternative, I would suggest a provision prohibiting the Commission from deleting the VHF assignment of an existing station, or of changing its assignment to a channel other than another VHF channel, or of requiring it, without its consent, to be licensed to a community other than the community for which it received its license. At the same time, should be made clear that such provision would not preclude the Commission from exercising its authority where it deemed

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other markets, a UHF station's potential may be a fraction of that of the VHF station.

Despite these disadvantages, the mere fact that one broadcasting station does not serve as many homes as a competing station has not prevented successful competition. Many 250-watt radio stations have operated beside 50,000-watt clear-channel stations, and in television some UHF stations have operated successfully alongside a VHF station.

The CBS television network has 22 UHF primary affiliates with nighttime rates ranging from $50 to $600. The rates of these stations total $6,345.

Some of these stations—such as those in Scranton, Peoria, South Bend, and Fort Wayne—operate without VHF competition. On the other hand, the CBS television network has UHF affiliates in Bakersfield, Columbia, Erie, Evansville, and Montgomery which have VHF competition. These five UHF stations during the month of January carried approximately 80 percent of the network's full commercial schedule.

[2] There has been criticism of the proposed all-channel receiver legislation on the ground that it would impose an additional cost to the public, a cost that would be particularly burdensome in those communities which might not have a UHF station in operation. This criticism could be answered by the elimination of the Federal excise tax in the sale of all-channel receivers. We are, of course, aware that proposals for the elimination of the excise tax on all-channel receivers have been made in the past—CBS has supported such proposals—and have not received the support of the Treasury Department. The Congress, however, might wish to reexamine the feasibility of such legislation.

it necessary in the public interest to reassign unused VHF channels to communities other than those to which they had been assigned, or to assign additional VHF channels where appropriate.

The CHAIRMAN. Thank you, Dr. Stanton. Mr. Mack.

Mr. MACK. Dr. Stanton, how does CBS go about securing its affiliates?

Mr. STANTON. We try to get the best combination of affiliates, Mr. Mack, to serve the national audience. This includes both VHF and UHF stations. We have 22 UHF primary affiliates on the network at the present time; and the balance of the network of 190-odd stations are VHF stations.

Mr. MACK. When you select a certain community, what factors are considered with regard to the television station, if more than one is interested in affiliating with CBS?

Mr. STANTON. We have set forth those criteria, sir, in a document which is a part, I believe, of the record of this committee, and certainly it is a part of the record of the FCC. I do not have all of the criteria clearly in mind, but they include, as No. 1, the ability of the potential affiliate to serve the people in the area. We are interested, then, in finding out how that station performs that function. It is not merely a matter of power or coverage area, but how well that station serves the community in attracting audience to its transmitter and to its programs.

The selection of the markets is on the basis of taking the larger markets first, because that is where you get the largest number of people. But the ultimate objective is to serve the entire Nation.

Mr. MACK. But you are quite interested in serving as many people as possible; is that correct?

Mr. STANTON. Absolutely. We try to come as close to 100 percent of all the television families as possible.

Mr. MACK. Therefore, if all other requirements were equal, then you would probably select a station that has the greatest listening audience; isn't that correct?

Mr. STANTON. That is correct.

Mr. MACK. And that would be the reason that you select—normally select a VHF station rather than a UHF station?

Mr. STANTON. That is correct.

Mr. MACK. The proposed deintermixture would limit the number of people that would be available for your service—limit the number of people who would see CBS, if your affiliates would be intermixed, so that they will be operating off of UHF stations.

Mr. STANTON. Yes, sir.

Mr. MACK. Dr. Stanton, do you know whether any work is being done by the industry to perfect the signals of the UHF transmitters?

Mr. STANTON. We are not in the transmitter manufacturing business, so that I do not have that information first hand. I do believe that at least one of the large manufacturers is conducting research which could lead to improvements in transmitters and receivers as well.

Mr. MACK. To your knowledge, are there any other manufacturers who are attempting to perfect the receivers, the UHF receivers, I mean?

Mr. STANTON. I have no firsthand knowledge of that effort, sir.

Mr. MACK. Dr. Stanton, is there any particular problem involved in the production of portable television sets with regard to all-channel receivers?

Mr. STANTON. I would expect that there would be the rather fundamental mechanical problem of packaging more substance in a small package. The portable set, by definition, is a compact version of a television receiver. To include the additional tuner, which is required for the all-channel set, would presumably take up more space. Whether that can be nested or packaged around the neck of the tube is something I am not familiar with.

Mr. MACK. To the best of your knowledge, that would not interfere with the continued production of portable sets?

Mr. STANTON. To my way of thinking, it would not.

Mr. MACK. I would like to ask one other question concerning the UHF and VHF—since you have indicated your interest in educational television, do you feel that it would be advisable to put all of the educational television programs on UHF, and therefore release additional VHF channels in such communities as Champaign, Ill.?

Mr. STANTON. I would want to study that in giving you my answer, sir. I would want to study it on a market-by-market basis. I do not believe it is necessary to relegate all of educational television to UHF.

Mr. MACK. In other words, you feel that we should have intermixture as far as educational television stations are concerned.

Mr. STANTON. I do.

Mr. MACK. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Springer.

Mr. SPRINGER. Dr. Stanton, you say in here, in this statement, that it is estimated presently—and apparently your figures are accurate—that about 8 percent of the receivers in the country can receive UHF.

Mr. STANTON. Yes, sir. That figure is at difference with the figure that the Chairman of the FCC submitted, which I believe was 16 percent. That figure—he ought to be in in a position to know—but that figure strikes me as being rather high.

Mr. SPRINGER. Last year, about 8 percent of the receivers that were sold on the market could receive UHF. Is that approximately correct?

Mr. STANTON. I think it is closer to 6 percent, sir.

Mr. SPRINGER. Closer to 6 percent.

Now, Dr. Stanton, this committee has the responsibility which I often term to be the public interest. In view of that situation, it would appear that the public interest would be served by having some kind of legislation which would make compulsory an all-channel receiver in interstate commerce. Am I right in stating the public interest is that?

Mr. STANTON. I believe that to be the fact, sir.

Mr. SPRINGER. Now, as a background for this, there are about 181 VHF channels that are not assigned. There are about 500 that are assigned. There are about 103 UHF channels that are assigned and are apparently being used, but there are 1,441 UHF channels that are not assigned.

Now, if you are going to have a development on any substantial scale, which the Chairman of the Commission talked about here yesterday morning, it simply has to be in the UHF field, does it not?

Mr. STANTON. I think it has to be a combination of the VHF and the UHF.

Mr. SPRINGER. But the substantial increase, the percentage of increase possible is in UHF?

Mr. STANTON. It is.

Mr. SPRINGER. So, therefore, the public interest would be served by having a receiver on the market which could receive both of them, is that right?

Mr. STANTON. Yes, sir.

Mr. SPRINGER. Now, I want to come to another question of public interest, and maybe the chairman would agree with me on what I have said thus far, I think there is a public interest in the V field.

Now, the argument before this committee is, what is that public interest at the present time? Now, the people who are receiving now and can be served in the great broad rural areas of this country are being served by V's, aren't they?

Mr. STANTON. They are.

Mr. SPRINGER. Actually, as a matter of fact—and I take it this is based on your experience, not taking you as an expert in this field now though I think you are going to be about as near an expert as we are going to have before this committee—based on that, the only possibilities for this great group of people—those areas spread out on that map back there marked yellow, and a good part of the light green, are the areas now being served by V's, isn't that correct?

Mr. STANTON. Yes, sir.

Mr. SPRINGER. Now, if we start out in a great broad program of deintermixture, if you do that, it means that you are going to have to put in a tremendous number of U's, aren't you?

Mr. STANTON. To fill the same space now covered by the V's, yes.

Mr. SPRINGER. Now, this is the question which I want to ask you as an expert. Based upon your experience as the president of one of the large networks in this country, is that economically feasible?

Mr. STANTON. I have to give you an "iffy" answer to that, Mr. Springer, because this is what I refer to in my statement when I talk about a massive effort to develop the UHF. It could be economically feasible, in my book, if we got low-cost transmitters and very efficient transmitters, things that we do not now have. We have seen a lot of changes come about in the VHF in the short dozen years that we have had it. So that I am optimistic in believing that this is a possibility if we all get behind it and make it work. It doesn't necessarily follow, however, that if you are going to have more nationwide services than you now have that they will have to serve the broad geographic areas that are now served by V's. It is my opinion that they will do that, but it isn't necessary to have all nationwide networks serve the rural areas as well as the urban areas.

And lest I be misunderstood, I am not trying to shortchange the people that live in rural areas. But I could, looking down the road, see a kind of network service which would be largely an urban type service, not one of the existing networks, but a sixth or a seventh network, if you will, a specialized service, which would be a city-kind of network. The ultimate coverage of the country, though, with UHF would require more stations than you have to have with VHF because of the point that you have made earlier.

Mr. SPRINGER. Now, Dr. Stanton, I want to pin you down a little bit closer on that. Is it economically feasible today?

You gave me an "iffy" answer, as I understand it, on what the future is. I am asking you, is it economically feasible today?

Mr. STANTON. The answer is "No," in my opinion, for two reasons. First, because of the coverage disparity between the UHF and the VHF; and, second, because you wouldn't have any audience for a nationwide service in UHF today.

Mr. SPRINGER. Now, may I come to the second. At the present time you are somewhat familiar with the situation that exists in central Illinois in the area covered by channel 3, WIC, Campaign?

Mr. STANTON. I am.

Mr. SPRINGER. An engineering survey which I have conducted indicates that in order to give these people the same service, I am not talking about an inferior service, I am talking about the same service as they have at the present time—it would take a replacement of between six and eight U's, and I don't think anybody is arguing less than six, and there are two in the area, so I take it the minimum would be four additional at least.

Now, based on your experience, is that economically feasible at the present time, based on the population contained within that area?

Mr. STANTON. I would believe it would not be economically feasible.

Mr. SPRINGER. Yesterday I had a new experience. I appeared on a program with the distinguished gentleman from Colorado, a member of this committee, Mr. Dominick. I didn't even know what Colorado had. Are you somewhat familiar with the V situation as it exists in the State of Colorado?

Mr. STANTON. Only in a very general sense.

Mr. SPRINGER. The V's cover an extremely wide area.

On this program we introduced a chart, I think it is accurately drawn engineeringly, in which the areas served by the V's were on an overlay over that served by the U's, which would be substituted in the same area. It was substantially smaller, depending upon what the quality of the U was, whether it was in the lower band or in the upper band. If you were to put U's in Colorado giving the same service in same area that is now covered by—seven, Mr. Dominick?

Mr. DOMINICK. Nine.

Mr. SPRINGER. By nine VHF stations—do you believe it would be economically feasible, if replaced by U's to cover the same area?

Mr. STANTON. As of today I do not believe that to be the case.

Mr. SPRINGER. To come to the last point, Dr. Stanton, I take it by your statement on page 11 that your suggestion for the solution of this present dilemma which we are in by virtue of this rulemaking proceeding on eight stations, and the study which has been made on six or seven additional stations, that your solution to the problem as of the present time would be in the nature of some kind of legislation which would give these stations a grandfather clause right.

Do I understand that to be, in general, your position?

Mr. STANTON. In general that is correct. I suggest in my statement that the V's that are presently assigned to these communities not be removed from the communities.

Mr. SPRINGER. Yesterday I believe the chairman said—I have been trying to get a copy of his speech, but I haven't, but I believe I recall

this correctly—that he had been notified by those in education they would need an additional 160, I believe.

Mr. STANTON. I think the figure is closer to 900.

Mr. SPRINGER. V's?

Mr. STANTON. No; I am sorry——

Mr. SPRINGER. I believe it was 160-some V's, that is my recollection. And I think it was 800 U's—or 900 U's. I believe those were the figures.

Now, it was your suggestion that you possibly could squeeze an additional three out of the band in the V field. Did I understand you to say that?

Mr. STANTON. No, I don't believe I said that, but maybe I didn't understand your question.

Mr. SPRINGER. Now, at the present time you run from channel 1 through 12; is that correct?

Mr. STANTON. Yes. The three that I referred to in my statement had to do with a suggestion we made in 1955 that we try to get from another branch of the Government spectrum space that would allow three additional channels between channel 6 and channel 7.

Mr. SPRINGER. Out of these approximately 160, we do have 81 presently not assigned. Now, it is my understanding that some 80 of those are in litigation, according to the chairman yesterday. But it is still possible to supply education with a very substantial number of those already unallotted, isn't it, a substantial portion of the 160?

Mr. STANTON. I don't have the figures in front of me, but I believe that there are a number of those stations that have already been reserved for education that are in the V part of the spectrum.

Mr. SPRINGER. I think you are right on that. So I will withdraw my question with reference to that.

I wanted to get a little more specific answer on this. Based on your experience as of now in this field, do you believe that substantially all of the educational TV could be taken care of by UHF if we had all channel receivers?

Mr. STANTON. Yes, I think we would get down to a question of how we define "substantially," but I think substantially all of this could be taken care of by UHF.

Mr. SPRINGER. That is all, Mr. Chairman.

Mr. STANTON. May I add just one footnote there, sir?

This might require a reassignment or reallocation of the UHF channels. At the present time the Commission has an allocation of all the UHF channels. In order to accomplish what you were just questioning me about, I think it might require a restudy of how those channels are allocated in order to achieve the substantial coverage by UHF.

I wanted to make clear that I wasn't basing my answer on just the allocation table as it now stands.

Mr. SPRINGER. Just one more question, Mr. Chairman.

Now, I come back to this thing, and I want to get your opinion. If this committee came up with an all-channel receiver bill or legislation which included within it a grandfather clause for the present V's, or some kind of legislation connected with the bill, the all-channel receiver bill, which would prevent the shifting of these V's from their present location, is it your opinion as a layman, and based on your

experience as the president of a great network, would we be substantially serving the public interest?

Mr. STANTON. I believe you would.

Mr. SPRINGER. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Rogers?

Mr. ROGERS of Texas. Doctor, will you tell me the difference between UHF and VHF?

Mr. STANTON. The first difference is that the VHF is in a different part of the spectrum than the UHF. VHF stands for very high frequency and UHF stands for ultrahigh frequency. So that the first distinction is the physical one of where they are located in the spectrum. And, as a result of that difference, a number of other things follow. Those are set out in the footnote on page 8 of my statement. Perhaps it would be helpful if I read this into the record, because I think it will answer your question.

Mr. ROGERS of Texas. Would you do that? What I am trying to do is to get a documentation of the difference. We have had these hearings, and I don't think any place in the record it has been pinpointed. That question has been asked me a number of times, and sometimes when I give the answer people look at me like I don't know what I am talking about, and I would like to get it from an expert.

Mr. STANTON. I am sure that the engineers would add many more words to what I have in this footnote, but I believe these will give you the highlights.

The footnote reads:

> There is little doubt that UHF channels, in the present state of the art, have several disadvantages. Although there may be disagreement as to the quantitative measure of these disadvantages, there is fairly good agreement on several basic points:
>
> First, under average conditions, experience demonstrates that a UHF station does not serve as large an area as a VHF station.
>
> Second, within the area served, a UHF station generally has more "shadowed" (weak signal) locations than a VHF station.
>
> Third, in terms of homes served (as distinguished from geographical area), a UHF station may be able to reach almost as many homes in some markets as does a VHF station. In other markets, a UHF station's potential may be a fraction of that of a VHF station.

This is simply a matter of the density of the population. If it is all close to the center of the city, then the U and the V would presumably cover about the same amount. But if it is in a rural area then, of course, with a dispersed population, there is a great disparity between the V and the U coverage.

I believe those are the points that I would give in answer to your question, sir.

Mr. ROGERS of Texas. Now, both can be operated, as I understand it, at the same time, without interfering with each other?

Mr. STANTON. Yes. That has nothing to do with the UHF–VHF situation. A U and V can operate simultaneously just as two V's or three V's or four V's can operate simultaneously.

Mr. ROGERS of Texas. So there is no conflict there.

Now, Mr. Friedel has asked that I ask you the question as to the density mileagewise; how far will a UHF go out?

Mr. STANTON. This will vary depending upon the height of the transmitter tower; it will vary depending upon the nature of the terrain; it will vary on the basis of other physical facts. But as a

rule of thumb, say the radius of a V is X, then the radius of a U would be about 40 percent of the radius of a V.

Mr. ROGERS of Texas. So if your V went out 100 miles, your U would go about 40 miles?

Mr. STANTON. Yes; rule of thumb.

Mr. ROGERS of Texas. Now, Doctor, it seems to me that the reason that there have not been more UHF assignments is because the VHF covers the larger area, No. 1. And, No. 2 is that there are no appreciable amounts of UHF receivers, is that correct?

Mr. STANTON. Yes. And which came first, the chicken or the egg, I am not sure.

Mr. ROGERS of Texas. But the fact of the matter is this: We were talking about the economics of the situation a minute ago. In your opinion do you feel that if all the television sets had been equipped with both VHF and UHF receivers you would have had a different picture insofar as the past is concerned?

Mr. STANTON. Yes, sir.

Mr. ROGERS of Texas. And you think, as I understand your testimony at the present time, that H.R. 8031 would operate to the best service of this Nation in providing the UHF receivers on these sets that are sold to the user or handled in interstate commerce and, hence, you would cure this situation that has developed?

Mr. STANTON. The only reaction I have to your statement is that I don't believe H.R. 8031 accomplishes that as well as perhaps some of the other bills, because the language of H.R. 8031 goes further than is necessary in giving the Commission authority to set standards for the performance of the receivers. To me, the important thing here is to make sure that the receivers will get both the UHF and VHF channels. I read 8031 to go beyond that and to get into such questions as high fidelity of the sound and the picture brightness and things of that kind, which I think fall outside of the requirements of the present situation.

Mr. ROGERS of Texas. You feel, though, that that is within the present jurisdiction of the Commission?

Mr. STANTON. No, sir; I do not.

Mr. ROGERS of Texas. You do not. Well, let's confine this to these issues that are before us. And I appreciate your situation there. I was using H.R. 8031 more as an example. What you feel like is that the sets ought to be equipped with both the VHF and the UHF receivers. How we do that is a different thing, but that is the point. And you also feel that in doing this it would be necessary to provide, in the language of H.R. 9277 or some other measure, against the discontinuance of present licenses to VHF channels?

Mr. STANTON. Well, I started out with the belief that the all-channel receiver was the answer. The question then arose because of the order to deintermix. Whether the two are tied together is not critical as far as I am concerned, except that I believe that the public interest, as far as television service is concerned, will best be served by a combination of the VHF and the UHF. Therefore, I would not want to see anything done to disturb the present VHF assignments. Whether the two are tied together is of no concern to me so long as we get the all-channel receiver and we don't do anything to the VHF service.

Mr. ROGERS of Texas. Then if the Commission should follow out the suggestion of the chairman yesterday, that if the bill is passed, we will say, providing for each set to contain both the VHF and the UHF receivers, and they would give this committee or the Congress their assurance that they would not get into this other field until an opportunity had been had to determine whether or not the providing of the UHF and the VHF receivers on each set would settle the question, do you think that would meet with your approval?

Mr. STANTON. I think it would, up to the point where you said "until," and I am not sure that that "until" would satisfy me, as you put it in that question. But if you could get assurance from the Commission that it was not going to deintermix or disturb the V allocation by communities, that would satisfy me.

Mr. ROGERS of Texas. Yes, in other words, that they were not going to deintermix unless it was established firmly that the VHF and the UHF would not answer the problem?

Mr. STANTON. I think we know that answer now, sir.

And that is the reason I am reluctant to have the "unless" or the "until" part of that statement.

Mr. ROGERS of Texas. You do think, though, Doctor, that this would provide the solution, and that the economics with which the UHF has been plagued in the past would be resolved?

Mr. STANTON. Yes, sir. And you have some pretty good experience to draw on there, because you are familiar with the 50-kilowatt or the 50,000-watt radio station competing with a 250-watt station in the same community. And, in a sense—perhaps my friends in UHF won't appreciate this parallel—but UHF is a lower powered radio station as compared to a 50-kilowatt station. Now, they have competed successfully. But in doing so they—the lower powered radio stations—didn't have to go out to get people to buy radio receivers to hear it. The existing radio receivers would allow them to get both stations. That is what you would accomplish by the all-channel receiver legislation, and that is why I think economically it will work in the future.

Mr. ROGERS of Texas. You think it will get into a position where it will then be a contest of selling, whoever could provide the better selling or the better programs would be the ones who would get the business?

Mr. STANTON. Yes, that would have a large part to do with the final answer.

Mr. ROGERS of Texas. Now, Doctor, you spoke of the grandfather clause, and I think the words used were "grandfather's rights."

Now, of course, in referring to that you refer only to the right, not to deintermix, do you not—I mean, it would have nothing to do with the situation as to whether this is a right or a privilege insofar as the license itself is concerned?

Mr. STANTON. I believe, Mr. Rogers, that it was Mr. Springer who used the grandfather phrase. My concept of "grandfathering," if you will, is that the frequency or the VHF channel be tied to the community, but that it not circumvent the licensing procedure.

Mr. ROGERS of Texas. Thank you, sir.

The CHAIRMAN. Will the gentleman yield on that point?

Mr. ROGERS of Texas. Yes, sir.

The CHAIRMAN. Pursuing it, since it is on that point, I recognize the "unless" or "until" or any other reservations that Mr. Rogers used in his question. But if it comes to a point where it would either be legislation providing for all-channel receiving sets without the other requirement attached on it, on the basis that the Commission would not pursue their deintermixture policy until we found out whether, 5, 6, or 10 years in the future something else might be required, or no legislation at all, would you suggest that the committee pursue the bill that could be accomplished?

Mr. STANTON. I feel very strongly, Chairman Harris, that the compromise position is preferable to no legislation at all. And certainly the Congress can deal with the Commission at any time it chooses to do so if it finds that it is doing something in terms of deintermixture that it doesn't approve of.

The CHAIRMAN. Will the gentleman yield for one more question?

Mr. ROGERS of Texas. Yes.

The CHAIRMAN. You would not tell this committee that 7 or 8 years from now the picture might not be changed in some way from what we have now, would you, Doctor?

Mr. STANTON. I would not.

The CHAIRMAN. In other words, there are 458 commercial VHF stations on the air in the United States now, and there are some 42 educational stations on the air? There are a few UHF, very few. The fact is that there is a possibility that some 1,500 or 2,000 commercial stations may be on the air 7 or 8 or 10 years from now. That could very well change the entire picture, could it not?

Mr. STANTON. It could.

The CHAIRMAN. Thank you.

Mr. ROGERS of Texas. That is all, Mr. Chairman.

The CHAIRMAN. Mr. Schenck?

Mr. SCHENCK. First of all, I want to welcome my fellow Daytonian to this committee. We are always very proud to recognize Dr. Stanton, whom I have known for many years, to this committee.

I am quite interested in a number of questions that have been asked here. And it would appear that the question the chairman just asked on a compromise situation of approving an all-channel receiver, not including anything on the grandfather clause, might just delay and delay the policy that perhaps should be enunciated now.

I wonder if you have any feeling on that?

Mr. STANTON. I do have a feeling, and that is why I said in my concluding paragraph that I thought the bill ought to include some statement that would give the Commission guidance or national policy on deintermixtures, while at the same time not tying the Commission's hands to the point where it couldn't function and fulfill its responsibilities.

I think that the No. 1 situation we face here is the all-channel legislation. But very close behind that, in my opinion, is not upsetting the service that is now being given to the public. And I refere specifically to deintermixture of the eight markets that are proposed for deintermixture.

Mr. SCHENCK. That is exactly what I hoped you would say, because it appears to me that unless we take some specific and definite action that the communities which are concerned with the possibility of

deintermixture will be constantly in hot water until some definite policy is established.

Mr. STANTON. It was to preclude that possibility that I suggested that these VHF assignments be frozen, if you will, to the communities, not to the individual licensee, but to the community.

Mr. SCHENCK. I remember Ernie Ford said one time that someone was as nervous as a long-tailed cat in a room full of rocking chairs. And I think that perhaps illustrates the situation of communities and television operators, when they just don't know what is likely to happen.

Now, Dr. Stanton, does the circle of service, VHF service area, have anything to do with its power?

Mr. STANTON. It does.

Mr. SCHENCK. If the power were reduced could more VHF stations be included or put closer together?

Mr. STANTON. Yes, but at the sacrifice of service to the public.

Mr. SCHENCK. Well, there are certain rules and regulations now that one tower must be so many air miles from another tower, I believe.

Mr. STANTON. Yes, sir.

Mr. SCHENCK. And if the power was reduced, then that mileage could be reduced?

Mr. STANTON. And more circles could be fitted into the whole map of the United States, if that is the extent of what you were saying. In the process of doing that, I believe the public would lose service.

Mr. SCHENCK. Now, do the networks——

Mr. STANTON. In addition to that, of course there is the economic question of supporting these additional transmitters. But I am setting that aside and looking just to the end product of service to the public.

Mr. SCHENCK. That is what I want to get to, also.

Do the networks buy station time?

Mr. STANTON. Not in the conventional sense of buying the time or buying products. What we do is to sell the time and then the station gets a part of the income that we get when we sell the time. We represent the station, the groups of stations in selling them as a group, and they are paid out of the income that we receive from the advertiser.

Mr. SCHENCK. Then if there were a greater number of stations there would have to be necessarily an increase in cost of the programs?

Mr. STANTON. Yes, because you can't operate three stations that serve the same area as one station as economically as you can operate a single station serving that same area.

Mr. SCHENCK. And, of course, that increased cost would be passed on to the sponsors of the program?

Mr. STANTON. It would ultimately be passed on to the consumer.

Mr. SCHENCK. So if we had a lot of UHF stations rather than fewer VHF stations, then the ultimate cost to the consumers would be higher for the programs?

Mr. STANTON. Not for the programs. But you would have higher operating cost for the station operator.

I believe that experience and research will drive the cost of operation down for the UHF station operator. That is why I indicated that I thought we had to go into a massive program of research to get

equipment costs and power utilization costs and so forth reduced to make the UHF a more competitive operation to VHF.

Mr. SCHENCK. Is the cost of UHF equipment and operating a station in approximately the same area as VHF?

Mr. STANTON. First of all, the cameras and the studio equipment are exactly the same for V as they are for U. But when you get to the transmitter, I believe you run into higher costs per number of people served, because your power distribution is over a fewer number of families, just by virtue of the fact that you are dealing with a smaller geographic area.

Mr. SCHENCK. Now, you have suggested that we should approve legislation which would include all-channel type receivers to be sold in interstate commerce.

Mr. STANTON. Yes, sir.

Mr. SCHENCK. Have you any information as to the probable or possible cost of the additional tuners or other equipment needed to make these into all-channel receivers?

Mr. STANTON. It has been variously estimated at around $10 or $12 of the manufacturer's cost. We were in the receiver manufacturing business some years ago, and I believe that those figures make sense in terms of the experience that I had at that time.

I do not have any firsthand information on tuner costs at the present time. The figure that has been used for the public's cost would be $20 to $25 more for the all-channel receiver than for the comparable VHF-only receiver.

Mr. SCHENCK. There are certain areas in the country, throughout the country, because of terrain and other situations, where UHF will not satisfactorily serve an economically feasible market?

Mr. STANTON. That is certainly true today, but I am not sure that it would be true 7 or 8 years from now, as Chairman Harris was mentioning earlier. I think we don't know enough yet about what the UHF can do if the receivers are there for the programs to be received. We haven't yet licked the problems of getting additional power and more efficient coverage for UHF.

I think it would be unfair to say flatly at this time that there will be areas in the future that can't be served by UHF. I think we don't know at the present time.

Mr. SCHENCK. The Chairman yesterday talked about additional booster stations here and there that would boost UHF signals.

Mr. STANTON. I am very sorry, I was going off on a tangent in answering your question. I assumed in answering your question the way I did, sir, that this would involve the use of boosters and satellites, not the kind that go around the globe but satellites as we know them in the broadcasting industry, to fill out these areas that might be behind mountains or in parts of the terrain where they couldn't receive the mother station.

Mr. SCHENCK. One reason for asking you this question, Dr. Stanton, is this, that if we pass a bill which would require each and every set, estimated at 6 to 7 million sets per year, to be equipped for full channel reception, then would we not be placing an unfair cost burden on the purchasers, of a good many people who would not need the all-channel service?

Mr. STANTON. That argument can be made, certainly, for the immediate future in certain areas. If you look down the road far enough, I believe you must come to the conclusion that you require UHF in combination with VHF in order to take advantage of what television can do for the people in this country. I refer not alone to commercial broadcasting services, but to the educational services. Even in a city such as New York where you have seven VHF stations, many people would say that seven is not adequate for New York City. We now have channel 31 on the UHF experiment which the FCC is conducting. That channel, as I understand it, will be given, or perhaps has already been given, to the city of New York, and will be used by the city school system. It would be desirable, it seems to me, to provide all-channel receivers in a market with seven stations such as New York, because you will have specialized services, perhaps in the future, largely in the field of education. Or you could take advantage of the service if you had the receivers in the homes. I can think of very few places where the all-channel receiver would not be an ultimate benefit to the public.

Mr. SCHENCK. I quite agree with you.

And yet, Dr. Stanton, we here by legislation would require each and every purchaser of a receiver to buy an all-channel receiver regardless.

Now, we do not do the same thing with regard to automobiles. For example, automobiles have a certain base price, then there is a group of safety devices which includes power windshield cleaners, a directional light, backup lights, et cetera, for so many more dollars. Now, why should we not do the same thing on a TV receiver, and give the public a choice as to whether or not they would want to buy one with a UHF all-channel?

Mr. STANTON. I had some difficulty in reaching a philosophical position on this particular point, Mr. Schenck. There seemed to me to be a better way to do this. But for several years we have tried to get it done that way, and we haven't been successful. I refer to the removal of the Federal excise tax on the all-channel receivers, not on the regular sets, but just on the all-channel receivers. That would tend to bring the price of the all-channel receiver down so it would be competitive with the VHF only receiver. It is pretty difficult to sell all-channel receivers in a market that has three or four VHF transmitters, or in an area where three or four VHF signals can be received.

I can't find any parallel for what I am suggesting in other fields. Certainly in the automotive industry, as you point out, this isn't the case, although in some States you do have requirements regarding traffic signal lights and other requirements which raise the cost of the automobile in that particular State.

The thing I think we have to look at here is that television is a total system, and that part of it is down in the VHF and part of it is up in the UHF. We have got to forget how we got to this mess, because that won't get us any place. We can point fingers and say who is responsible for the mistake made in 1952, but that isn't going to solve the dilemma in 1962. But if you look at this as a total system, then I think there is justification for saying to the public, you must buy a receiver which gets both the VHF and the UHF channels. But this is a sticky wicket, as our friends across the channel would say. I think that it would be better if we could do this by the re-

moval of the Federal excise tax. But I assume from our bitter experience on that front that that door is closed to us.

Mr. SCHENCK. Of course, that could be discriminatory, could it not?

Mr. STANTON. You are driving me into another philosophical pocket. I think you have to look at the national interest, and the national interest, in my opinion, dictates clearly that we have to look at this as a total system. It is VHF and it is UHF. I think we have to be realistic about it and face it as a program which will require the purchase of receivers which will get both the V and the U.

Mr. SCHENCK. The same thing, Dr. Stanton, could be said about the automobile situation, it is in the national interest to have windshield wipers and windshield washers and backup lights and directional signals, et cetera.

Mr. STANTON. Good as they are, and I am not trying to deprecate them, but good as they are, you can still drive your car from city A to city B whether you have or don't have windshield wipers—unless you were driving yesterday. But in television, to move over into the situation that we are discussing, you can't get program B unless you have a receiver that will allow you to receive program B. It isn't a question of having an additional feature on the set such as the windshield wiper or a special tone control. This is the fundamental guts of the receiver. This is whether or not it has wheels on it, if you will. This is whether it has the tuner that will receive the programs.

Mr. SCHENCK. Of course my point was that we are making everybody under this legislation buy this total all-channel receiver, whereas many of them will not want it, and won't use it if they have it, and are unwilling to pay for it. Assuming 6 million TV receivers will be sold in 1 year and the additional cost for a UHF tuner is $25, this will increase the cost $1.5 million to the purchasers a year or $1.5 billion over a period of 10 years and such an amount seems too high to me. That is all.

The CHAIRMAN. Gentlemen, we are running out of time here. We have to go to the House at 12 o'clock.

Mr. Jarman?

Mr. JARMAN. I have no questions, Mr. Chairman, but I would like to compliment Dr. Stanton on an excellent presentation.

The CHAIRMAN. Mr. Younger?

Mr. YOUNGER. I want to disagree with my friend here from Ohio. We consider that you are from California, Doctor, we have always claimed you as a good graduate of Stanford University.

Mr. SPRINGER. He was born in Dayton.

Mr. YOUNGER. He grew up and moved west to California.

In your statement, Doctor, you say:

> It will require a constructive and patient and confident attitude on the part of all of us.

Has an effort been made to accomplish the purposes of 9267 in a voluntary way?

Mr. STANTON. I believe it would be fair to say that an effort has been made. Obviously it hasn't been fruitful, or we wouldn't be faced with this present situation. I believe that the effort has been made.

Mr. YOUNGER. Do you think it is possible to do it voluntarily?

Mr. STANTON. I think it is possible, but I think it is improbable unless you couple with the voluntary basis the removal of the Federal excise tax that I mentioned in answering Mr. Schenck's question.

Mr. YOUNGER. And even with the legislation, however, you will still have to have the constructive and patient and confident attitude on the part of all manufacturers and broadcasters?

Mr. STANTON. Not so much for the manufacturer of the all-channel receivers, Mr. Younger, but for the development of more efficient transmitters, lower cost equipment, so that the UHF broadcaster can compete economically with the VHF broadcaster.

Mr. YOUNGER. How long a time do you think it will take to accomplish that, even if the legislation were passed?

Mr. STANTON. It is difficult for me to answer that question, because I don't know enough about the Commission's rules and how long the Commission would take to get out the standards for this receiver. But I would estimate that from the time that the standards were given to the manufacturers, and assuming that the manufacturers participated in the discussion of those standards so that the standards would be realistic, that it would take a year from the time that the Commission gave its go-ahead until the receivers began to go into the channels of distribution.

How much time has to precede that for the bureaucratic process, if you will, I am not able to say.

Mr. YOUNGER. In the manufacture of such receivers, does the manufacturer of the article normally precede the demand, or does the demand precede the manufacturer?

Mr. STANTON. As I understand the proposed legislation, we wouldn't be in the demand environment, because the only receiver that could be marketed in interstate commerce would be an all-channel receiver. So if you wanted to get a new receiver to get your VHF stations today, you would end up with a receiver that could get those as well as future UHF channels.

Mr. YOUNGER. Well, we always have difficulty in pinning these things down to interstate commerce. In other words, a manufacturer manufacturing in Chicago still manufactures the VHF receiver to be sold in Chicago, also there is nothing to prohibit the man that bought one in Chicago from moving it to some other locality; is there?

Mr. STANTON. Not at all. But I would defer to my legal friends about whether they could manufacture them within the city of Chicago and circumvent the regulations. You do have some regional manufacturers in television equipment, but for the most part I would guess that over 95 percent of all the units sold in this country are not sold in a community exclusively, but are shipped in interstate commerce.

Mr. YOUNGER. Now, I get from your testimony that if there was a full activation of all of these channels that we are talking about, both VHF and UHF, that you presupopse that there would be several more networks set up.

Mr. STANTON. Looking down the road, I do.

Mr. YOUNGER. Now, you also appreciate the fact that the Chairman of the FCC yesterday asked us not to tie these two pieces of legislation together, that they did not want any legislation in the deintermixture field.

Mr. STANTON. I am aware of that. I understand his position.

I am very much concerned, however, about anything happening to the V's that are assigned at the present time.

Mr. YOUNGER. That is all, Mr. Chairman.

The CHAIRMAN. Mr. Collier?

Mr. COLLIER. Dr. Stanton, the fundamental rule of economics as we know, the supply is always directly contingent upon demand. Might not this be another case of legislating to reverse this fundamental procedure to the point where we are to trading supply first and then hopeful that we are then getting the demand in this field?

Mr. STANTON. Not in my opinion, sir.

Mr. COLLIER. Recognizing that there are voids and partial voids in reception, to what extent in your opinion could this problem, the problem of transmission, be corrected by improved and increased booster relay facilities, particularly in those areas where you have terrain problems?

Mr. STANTON. Are you addressing yourself to the UHF problem?

Mr. COLLIER. Yes, sir.

Mr. STANTON. To a large extent, holes in the coverage area could be filled in by boosters or satellite stations. This is not entirely a question, though, of having large voids. It is, rather, having a number of smaller voids, and some of the voids will vary by season of the year, depending upon trees and foliage and so forth. So that you have a lot of small holes rather than necessarily one or two very large discrete holes. But you can have a combination of both depending upon the terrain. In flat country the large holes don't exist, it is largely the shadowing effect of small buildings and manmade objects and so forth.

Mr. COLLIER. But, actually, in many cases the reception both in quality and quantity could be improved by increasing the booster facilities for television presently available. Is that a correct statement?

Mr. STANTON. Yes; that is one of several things that can be done now. But another thing that immediately comes to mind is that the citizen or the owner of the receiver frequently could do a lot to help himself by installing at some cost, I will admit, a much higher receiving antenna. You can correct the situation in a variety of fashions, but it doesn't always depend upon the outgoing signal; it might also depend upon the receiving equipment both as to the receiver itself and as to antenna.

Mr. COLLIER. One final question, Doctor. Do you happen to know or have some general figure as to how much money is currently being spent to improve booster relay systems particularly in those areas where they are very necessary?

Mr. STANTON. I don't have information on that point, sir.

Mr. COLLIER. Thank you.

Mr. ROGERS of Florida. Just two questions, Mr. Chairman.

As I understand it, Dr. Stanton, you feel, first of all, that the capabilities of television cannot be fully utilized unless we have all-channel receivers.

Mr. STANTON. That is correct.

Mr. ROGERS of Florida. And then the priority you would place in solving this problem on intermixture or deintermixture would be,

first, to settle the problem of getting all-channel receivers to the American people?

Mr. STANTON. That is my primary objective.

Mr. ROGERS of Florida. Then we can deal with the deintermixture problem after that has been accomplished with much less difficulty and perhaps have it solved with all-channel receivers?

Mr. STANTON. I would only like to say, Mr. Rogers, that to me the important thing to remember is that we must think in terms of a UHF and a VHF system as far down the road as we can see. There is considerable concern in the industry about the possibility at least of the Commission ultimately pushing everybody up into the UHF. This, I think, will put us right back in the box we are in today of having too limited number of channels. I think that the layman generally feels that because the number 70 is used for the UHF spectrum, the part that is used for television, and 12 for the VHF, that it automatically follows that you divide 12 into 70 and you get over 5 times as many channels. But this is not the fact. So that you would end up with not many more competitive nationwide services in UHF than you have today in VHF, and we recognize right now that we don't have enough.

So I think we mustn't lose sight of the fact that the two have to go together.

I get nervous when the Commission talks about deintermix at the same time it talks about the all-channel receiver, but the No. 1 problem to be solved is the all-channel receiver.

Mr. ROGERS of Florida. Thank you.

The CHAIRMAN. Mr. Curtin?

Mr. CURTIN. One question, Mr. Chairman.

Dr. Stanton, in connection with the all-channel manufacture of these sets, have you considered the growing tendency for, and interest in, color television? Could you build the color television equipment into an all-channel set?

Mr. STANTON. I understand that you can, and that the receivers are already on the market.

Mr. CURTIN. And there wouldn't be an additional size or weight that would make it impractical?

Mr. STANTON. No, not that would make it impractical, there would be some slight additional weight, but not significant.

Mr. CURTIN. That is all.

The CHAIRMAN. Mr. Rostenkowski?

Mr. ROSTENKOWSKI. I have no questions, Mr. Chairman, but I would like to compliment Dr. Stanton on a very informative statement and rendering some very important testimony.

Mr. STANTON. Thank you, sir.

The CHAIRMAN. Mr. Dominick?

Mr. DOMINICK. Dr. Stanton, when color TV came in there were no sets that were then suitable to receive it, and yet the demand of the public was sufficient so that the manufacturers went into the manufacture of color TV sets and the public bought them. Don't you think perhaps that if we do this we are infringing on this same area, and that it's the same as saying, when color TV was available that all manufacturers must now supply sets that will receive color TV?

Mr. STANTON. No, Mr. Dominick, I don't think the parellel exists for two reasons. First the manufacturers didn't rush in to make color receivers, and as of today you have just a pittance of color receivers in the total receiving market. So that the manufacturers didn't move in. I believe the only company that did manufacture color receivers for many years was the company that proposed the system that was finally adopted by the FCC.

As to the second reason, sir, the man in Denver or in Fort Wayne or Atlanta under the system of color that was adopted still could get television service in black and white. Even though he may have had a black and white receiver and the program was broadcast in color he could still get the intelligence or the information or the entertainment just the same as though he had a color set, with the exception of the addition of color values.

But without the all-channel receiver, he can't get any information or entertainment if it is in the UHF unless he has the all-channel receiver. I don't think that the parallel does exist between the color situation and the UHF–VHF situation.

Mr. DOMINICK. Let me go a little further on this.

In Colorado we have nine VHF stations allocated and one educational VHF station allocated, six VHF stations which are assigned but not allocated. Now, we have no UHF in the entire State. If the UHF wants to start there are converters, as I understand it, which can be bought by the public for the same price that it would cost any member of the public to buy a new all-channel receiver, and they could buy the converter and make themselves a suitable listener, or whatever you want to call it, for a UHF station if it wants to start. All they have to do is to buy the converter. We saw one up here yesterday.

Now, this, granted, is a voluntary approach to it. But in a State like Colorado, where we have all these VHF stations, where the whole State is now served by TV in one form or another, it seems to me that it is imposing quite a burden on the public to require that they must buy another type of set, most of which they can't possibly use.

Mr. STANTON. I have no difference of opinion with you, sir, on the question of being able to buy the converter. I would only say that perhaps you can buy it for the same price but I can say quite positively that I don't believe a converter bought for the same price would give you the same end product of program quality or picture quality that you would get if you got it in an integrated or an all-channel receiver. I think there is a fundamental difference there.

The UHF operator starts with certain disadvantages put upon him by nature in the sense that he can't get quite as much coverage as the VHF man can get.

Now, if at the same time he has to take on that burden, he also has to take on the burden of going out and persuading you, or more particularly persuading your wife to allow you to string some wires around the room and put a converter on the top of a set that would give you not quite as good quality pictures as you get on the VHF, this, I think, is just about certain to sink the project as far as the UHF operator is concerned.

The CHAIRMAN. I am sorry, but the time is up, Mr. Dominick. We have to go to the House.

Mr. Kornegay, do you have any questions that you must ask of this witness?

Mr. KORNEGAY. No, sir.

The CHAIRMAN. Does any member of the committee want Mr. Stanton to come back?

We have got to get to the House.

Dr. Stanton, thank you very much. I wish we could be with you longer, because the committee is tremendously concerned with the problem. We appreciate the information you have given us.

Mr. STANTON. Thank you, sir.

The CHAIRMAN. The committee will have to adjourn at this time because the House is in session.

We have several witnesses that were on the agenda for this morning. I am afraid that some will be inconvenienced. I am going to suggest that you make yourself available tomorrow afternoon, although it is questionable that we will be able to meet because of business before the House which I have just been advised we might have. In that case, Friday morning is the earliest we can meet.

I hope the people here understand our situation. We certainly understand yours.

The committee will adjourn until tomorrow afternoon at 2 o'clock, unless further announcement would require us to meet, until Friday morning at 10.

(Whereupon, at 12:05 p.m., the committee recessed, to reconvene at 10 a.m., Friday, March 9, 1962.)

ALL-CHANNEL TELEVISION RECEIVERS AND DEINTERMIXTURE

FRIDAY, MARCH 9, 1962

HOUSE OF REPRESENTATIVES,
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.

The committee met, pursuant to recess and subsequent postponement, at 10 a.m., in room 1334, New House Office Building, Hon. Oren Harris (chairman of the committee) presiding.

The CHAIRMAN. The committee will come to order.

The first witness this morning as we resume hearings on H.R. 8031 and similar legislation will be Mr. William L. Putnam. Mr. Putnam is from Springfield, Mass, and is president of the Springfield Broadcasting Corp.

I am advised that Mr. Putnam is a member of one of our oldest pioneer families in the country and especially in New England.

I regret very much if we have inconvenienced you because of the delay in getting to you, but this committee does not have any control over the business of the House of Representatives.

STATEMENT OF WILLIAM LOWELL PUTNAM, CHAIRMAN OF THE COMMITTEE FOR COMPETITIVE TELEVISION

Mr. PUTNAM. I appreciate your problem, sir.

I have a lot of prepared testimony, but I don't want to burden you with all of it, because I am sure there are a lot of people you want to hear beside me. So I will abridge a good portion of this so that you can get on to other witnesses.

I have present with me, sir, Mr. Townsend, who is a consultant engineer, who may be able to answer certain questions the members of the committee might have in connection with the proceedings before you.

The CHAIRMAN. If the gentleman will permit, for the information of the committee and the witnesses who are here, it is my intention to conclude the hearings today if we have to stay here all night, and I hope that both witnesses and members of the committee will keep that in mind as we proceed today.

Mr. PUTNAM. Gentlemen, my name is William Lowell Putnam, and I am the chairman of the Committee for Competitive Television. In this capacity, I represent in large part of the views of approximately 20 percent of the present commercial television broadcasters in the United States, namely, those who operate stations licensed between 470 and 890 megacycles. I am also a station operator in Springfield, Mass.

I have appeared before various committees of the Congress on a number of occasions in the past and have testified repeatedly before the Federal Communications Commission. There are assuredly enough witnesses who have appeared here and elsewhere in the past who have bored you with long recitations of self-serving irrelevances; and I am aware of this tedium, so I will not hold your time any longer than necessary.

Gentlemen, we are admittedly a poor man's organization, we have only got a couple dozen station operators who can even afford to chip in a few dollars a month to this cause; so we cannot compete in the same ball park with those nationwide concerns who operate facilities that can only be compared to licensed piracy. So that you can have an idea of what the economic difference is in this matter, I am authorized to disclose to you that in one week of last January a VHF station operating in an otherwise UHF area, as deduced from its published rates and a monitor of its commercials, had gross revenue of approximately $130,000; whereas two of the UHF stations which operate in the same area had total income for the same period of $25,000 and $27,000. And I should point out that the U's have been in operation for twice as long as the V in this area.

Now, the figures I have quoted are admittedly deductions. I do not know the exact figure for the VHF station, but I suspect there is somebody in this room who could give it to you if he wished.

We in the UHF business, can, therefore, cloak ourselves not in a false mantle of platitudes and mealymouthed "public interest," but only with commonsense, decency, and the traditions of fairplay and free competitive enterprise that we like to tell our children are the traditions of our country. We cannot afford to hire expensive legal talent to present our case; we are stuck with me and as the records of the FCC bear out we who seek to bring to your attention the merits of expanding the usage of UHF are severely restricted in our ability to preach this gospel by the economics of unfair competitive handicaps which have afflicted UHF since the adoption of the sixth report.

Let me address myself, therefore, only to a couple of points. I will assume that we all agree that expansion of the television broadcasting industry is in the public interest, at least, we have all said so. And I would hate to be the political leader who had to report to his constituents that he worked to reduce the number of job opportunities available to his people. All we appear to argue about is the method of obtaining more television. The National Association of Broadcasters and the Association of Maximum Service Telecasters have indicated that they favor what they call the "side-by-side" approach. How they can do this with straight faces is beyond me, in view of the dismal record of "side-by-sideness" for the past 9 years; but as I have indicated facts are not too important to these interests.

In 1934 the Congress established a Commission that was supposed to be expert in this field, and while I have ideas on the subject, I feel, as you will agree is proper, that the place for these comments is on the record before this duly appointed Commission, where all the story can be weighed, and not before town meetings, or State legislatures, where only one side of the picture is presented and all the facts are not brought out.

Now, all-channel legislation, gentlemen, is no substitute for fair competitive opportunity.

We are submitting with our testimony the full text of which I am not using, a list of certain allocations in a few States. We have selected only the more densely populated States because it is in such areas that allocations have obviously become a severe problem. This sort of problem will crop up in other areas as time goes by and the population increases.

We have noted the television service potentially available in their communities to the residents of various districts set apart for congressional election purposes and as defined in the Congressional District Atlas of the United States, published by the Bureau of the Census, April 1, 1960. In these districts we have drawn attention again to the fact that television coverage is not necessarily to be equated with service, particularly as it pertains to air time for local activities, local merchants, local news events, local needs, local personalities and even local Congressmen.

Now, I would like to draw attention to the comments often made by those who speak in the interests of what I call the barrelshooters. There is a group that calls itself the Association of Maximum Service Telecasters, but try to get hold of their membership roster or the minutes of their meetings. This group describes itself as "an organization of approximately 160 television stations, both large and small"—I am not sure how the "small" gets into their description for no station that you or I would call "small" can qualify for their criterion of operating at the maximum permissible power limits prescribed by the FCC. But, perhaps, the word "small" is added so that you and I will think that these people represent something other than the interests of woud-be monopolists of great influence and endowment.

The representatives of this interest have told everyone that they are strongly in favor of the development of UHF; but they have never made this statement under oath, and they have so far successfully opposed every single petition before the FCC that has been aimed at the improvement of UHF television. Indeed they are the champions of the status quo.

As proof of their furtherance of UHF this group cites its support of legislation designed to encourage manufacturers to produce only all-channel television sets. Yet, gentlemen, tell me, have the people whose anguished outcries brought about these hearings, have these people, ever been in touch with you to urge passage of such legislation; or do we all know the answer to that one? These people would have you believe as they have tried to convince everyone else, that the ultimate in television service has now been reached. That this Nation needs only three channels in most major market areas, that the needs of educational television are being happily solved, that only the interests of national advertisers, as shown through the three networks, are important to the Nation, that the local interests of small businessmen are adequately served, that local issues in your districts are being given the attention by the most potent medium of our day that they deserve. These people would have you believe that everything is just fine in TV if you leave it alone.

These people will tell you that service is just fine—yet, tell me, gentlemen, how many of this committe can use this medium to reach

your constituents—or in some areas has television suddenly been offered when it never was available before.

I will not burden you with the recitation of the practical results of deintermixture for the files of the FCC will bear out that it has greatly aided in increasing service and competition, but I would like to incorporate here in your records a report on the matter by Prof. Dallas W. Smythe of the University of Illinois.

We should note that some 15 years ago countless people within the industry pointed out that any channels higher than six just wouldn't work at all. We were told with impassioned fervor and offered absolutely conclusive proof by some of the best names and wisest heads in the industry that the space presently occupied by channels 7 through 13 was incapable of utilization for television purposes, and the people who told us that this space wouldn't work, are the same breed of cat who are busy proving today that channel 14 is no good.

Now a great number of things have been said from time to time about the UHF channels by those people who know very little about the subject and who nevertheless pontificate at great length on this, or any other matter. You have had people come before you to talk about the UHF who represents manufacturers, you have had people come before you who have represented VHF operators and they will tell you things about the ultrahigh frequency television band. Now, I am not one to say that these gentlemen are not entitled to valid opinions, but I am here to tell you that I happen to know something about the ultrahigh frequencies, and I have gained all my knowledge the hard way. My company operates television channels from 14 to 81 and all the way stages and stations operate in some of the ruggedest mountain country east of the Mississippi and furthermore, for the most part, we make a profit. I will grant that we don't make a fantastic profit like those who oppose the Commission's recent proposal, and this, gentlemen, is a matter that I won't discourse on, but it bears very intensely on this entire subject. I am here to tell you that I know something about UHF and that those people who come here and talk from a wealth of inexperience on this subject are no more competent to tell you all about UHF than I am to tell you all about the Congress. I can tell you from having done it the hard way against what the FCC will attest have been pretty tough odds, that UHF can and does provide an excellent and very satisfactory means of serving "the public interest, convenience, and necessity" and the records of the FCC will bear this out.

I can happily and truthfully assure you that expansion of UHF telecasting will mean more job opportunities within this industry, more local television service to the advantage of local business interests and local community needs, more educational television, more minority interest television and a fairer distribution of the national income of this great and growing industry.

The Commission recently converted Fresno, Calif., to UHF by transferring its sole VHF station to channel 30 and has proceedings underway to do the same to Bakersfield. As a result of these affirmative steps there has been a scurry of interest in UHF broadcasting in that general area. Applications are in for a new station in Fresno, the fourth, and a Bakersfield station to increase its facilities. Visalia, which is 37 miles from Fresno and 65 miles from Bakersfield,

has a new station. Hanford, which is 28 miles from Fresno and 68 miles from Bakersfield, has a new station. Tulare, which is 42 miles from Fresno and 58 miles from Bakersfield, likewise has a new station. All this has occurred since the area was deintermixed.

Now, the statement is often made that it would be a terrible thing to force the people of some particular community to the expense of purchasing the additional tuner necessary to bring in the new channels. I would dwell on this one point only long enough to inquire of you by what distortion of fairplay is it right for our Government in the form of the Congress and the Commission to happily and knowingly force this apparently intolerable burden onto the people of the Second District of New Hampshire and the Second District of Massachusetts and not onto the people of the Second District of New York or the Second District of California? Why should just the people in some communities be forced to pay more in order to receive their local television service—one that will give a local advertiser an opportunity to reach his customers—one that will provide a means of expression to the religious and social needs of a community and indeed a television channel that will enable Members of this Congress to speak to their own constituents at any time? By what distortion of fairplay is it right to say that some people should have to pay this allegedly intolerable price and others should not?

Now, at the beginning of my testimony, which I did not read, I pointed out the extent to which some people go in order to receive a television signal into their homes. I do not know what some of these monstrous antenna arrays cost initially or in their frequent replacements. I do not know what the total annual cost of subscribing to a community antenna system might be, but I do suspect that the vast majority of people living in these fringe areas would receive a far stronger signal from a station much more concerned with their welfare and at far less cost where the Congress and the Commission to to further the development of local television service as is possible only through the use of all the television channels. How else can these people ever receive the full benefits of television, or are we forever to think in terms of coverage, and never to concern ourselves with service?

There are those who for years have tried to say that UHF television won't work—or at best it only works in certain areas—gentlemen, I appear before you as proof that this is so much hogwash—I have been studied from every angle for the past 9 years—at first I was a curiosity—a UHF broadcaster who was satisfied with his frequency. But you see I am not like the people who have never tried apple pie and who, therefore, don't like it—I have tried UHF and it works. It works in western New England—where we have some interesting mountains and a dense population—it works in central Pennsylvania where the mountains are even more interesting and it works in central California where there are no mountains at all, or trees either.

This entire hearing has taken up so much of your time and involved so much unnecessary turmoil is brought about by a very interesting situation, the true nature of which has never been honestly stated. You and I should be sufficiently honest, intellectually, to note that those who have come before you to protest the Commission's proposals are the operators of what in effect constitute licensed monoplies. Now

a monopoly is something repugnant to the American way of life; you have made laws against such things. Yet a monopoly in the manufacture of tires, for example, is merely that, and a tire monopolist does not have inherent in his monopoly the mechanism for convincing people that his empire is beneficial to the public. Yet a monopoly in the dissemination of public information, even a limited monopoly, with geographic boundaries, is a very dangerous thing, and as we all have seen, can operate to the gross confusion of the public as to the facts and the actual course of events. Without this distortion by these monopolists this very hearing would not be held. For these people are not kidding themselves and they are not kidding me and I don't think they are about to kid you, either. Now there is one other point in this regard. We have witnessed here a number of officeholders; Governors, State representatives, mayors, and Congressmen of both bodies, who have found themselves in the ridiculous position, placed there by those who have deliberately told them only half the story, of struggling for the preservation of monopolies and the suppression of additional job and business opportunities for their constituents. This alone should convince you of the strength and concurrent evil of these monopolies in the dissemination of public information. Any politician knows that it is easy to confuse the voters—yet only a truly potent and monolithic force could confuse so many politicians.

Much has been made of the testimony of various people over the last 9 years that in large part, the financial failure of UHF operations has been due first to excessive cupidity, and second to lack of business judgment on the part of those people who went into UHF in the first place. We would dwell on this subject for just a minute. Initially one should note that these statements again have been made by those who know absolutely nothing about the matter. But as for cupidity—we believe that for sheer grasping greed the UHF operator does not even deserve to testify in the same hearing room with those who have wilfully and continuously denied by pressure for excessive due process and repeated studyings, the benefits of a truly responsive and local television service, that would be something more to the people of this country than a mechanism for the enhancement of investors, the amusement of the masses and the advancement of national advertisers. And on the second item, since when is a person lacking in good busines judgment who relies on the word of our Federal Government as expressed in the official statements of the FCC?

Now, gentlemen, in 1958 the Senate Committee on Interstate and Foreign Commerce said:

> Deintermixture should be effected on as broad a basis as possible in order to make clear to the broadcasting industry, to advertisers and advertising agencies, and to the public that UHF is not only going to be maintained but expanded to assume its necessary place in our overall television system. In so doing, of course, long awaited encouragement will be given to many UHF broadcasters who are hanging on, despite severe losses, in hope that at long last something will be done for UHF besides talking about it.

Now, the House Committee on the Judiciary said, approximately the same time:

> The committee recommends that, pending the outcome of the proposed program of research and development concerning the feasibility of a major shift to UHF, the Commission vigorously press forward in its program of selective deintermixture, of which its reports and orders of February 26, 1957, are a

partial result. The Commission should broaden this program to include many more markets, if feasible in the public interest, and should continue to order the removal or conversion of existing stations where the public interest requires. The committee will follow closely the pace and progress of the Commission's deintermixture program.

Two-thirds of the channels reserved for education are in the UHF band. While educational broadcasting has made significant steps, the implementation of the assignments reserved for education continues at a snail's pace in our Nation's most critical era of teacher and classroom shortage. However, much of the hesitation by educational groups to commence broadcasting on channels 14 through 83 results from fears that UHF is not an effective medium. This impression stems from the many commercial failures in the ultrahigh frequencies; and as we have shown, these commercial failures have hardly been the fault of the frequencies or the operators. Whether or not you sympathize with the judgment of educators in this respect, the facts are that 10 years have passed and only 20 UHF educational stations are on the air. This constitutes but 10 percent of the spectrum space expressly earmarked for education. To clarify that—if commercial UHF broadcasting is permitted to deteriorate further, educational television goes with it.

The Members of this Congress must be readily aware that the daily press, printed variety, of this Nation is a relatively tightly held industry. This great and original medium of expression and information is dominated by a few very influential personages or corporation. Surely, every one of us has at some time or other found that if we held opinions or made statements or even engaged in activities which were not to the liking of the persons who control the newspapers and news magazines; then our actions, opinions, and statements were either completely ignored or hopelessly distorted in presentation to the public by these media.

Now, such is not the case in the radio industry. Though there are many, and you should note well who they are, that complain that this industry suffers from too much competition, the fact is quite clear that radio serves what many of us really know to be the interest of the public. By this I mean, that it is clear the matter of adequacy of competition, the diversity and even antagonism of ownership, and the localization of interest have brought about a great thing in this Nation. People have come to depend on their local radio station for local news, local advertising, and all forms of local service. Yet at the same time, the radio industry as we all know is not unavailable to the national needs of the entire American people.

The choice between which of these two paths to direct the television industry should never be in doubt.

Gentlemen, I would like to comment for a minute on the extreme flexibility that people have shown in their testimony here. For example, the testimony of Dr. Stanton, from CBS, was in opposition to deintermixture.

Now, of course, if I had 7 affiliates in the 10 areas presently being thought about for deintermixture, maybe I would adopt that position.

But I should quote to you what Dr. Stanton said earlier:

We are persuaded that the events since the lifting of the freeze confirm the correctness of our view expressed in 1950 and 1952, that the UHF portion of the spectrum should not be used in such a way as to require it to compete with the VHF portion of the spectrum in the same market.

That is a direct quote from Dr. Stanton himself, talking to the Senate.

Now, when he gets over here and talks to you people I guess he says something different.

But this is a flexibility of approach that is interesting.

There have been a number of other people who have a similar flexibility of approach, including some U.S. Senators from Connecticut and some Representatives from Connecticut who have come before you and made statements against deintermixture. And these have been presented to you, I have them here. And yet not too long ago they signed a petition to this very same Congress petitioning for deintermixture.

I guess it all depends on whose ox is being gored.

Now, gentlemen, there have been a lot of engineering things stated about coverage and not coverage, white areas, no white areas, people are going to lose service, people are not going to lose service.

If I may impose upon you, I have some material that my associate has prepared. Would you like to hear it directly from our consultant engineer, or would you like to ask me questions?

The CHAIRMAN. Mr. Putnam, you have the right to conclude your statement, and whenever you conclude your statement I will determine what to do.

Mr. PUTNAM. Would you like for me to put this into your thinking for the moment and then you can have at me.

In the Hartford problem I understand that witnesses have appeared here and repeated the gross misstatement, broadcast all over Connecticut, that 260,000 people will lose their only television service if Hartford is deintermixed. To my knowledge, no one here as yet offered to divulge the source of this terrifying figure. That number was apparently obtained from a survey taken from the engineering firm of the Association of Maximum Service Telecasters, an organization we have talked about, and conducted for the Travelers Insurance Co., one of the financial giants of this world, which operates the VHF station in Hartford.

Those who have appeared before this committee to cite that figure obviously have made no effort to investigate or fully interpret the results of the Travelers survey.

Now, in reply comments that will be filed with the Commission on June 22 it will be pointed out the inherent shortcoming manifest in this survey, which when fully analyzed appear to indicate that it was just handpicked to meet a particular requirement.

Now, we could go into detail, to describe how the Travelers method of measurement were not made according to the TASO technique as claimed by Travelers, of how vast sections of the so-called white areas were never even measured at all, and of how even the interpretation of results by the Travelers' legal counsel differed from the interpretation by the engineering consultants. It is not our intent to burden you with technical information you should not be trying to understand. The proper place for such argument is before the expert group you have established for this purpose which represents the only unbiased and competent body of experts in this field.

Such argument is not proper or intellectually honest before other groups where only part of the story is presented, whereas in the case

of this committee you cannot be expected to comprehend the intricate technical details involved.

However, to dispel any doubt you may have as to the extent to which these 260,000 people will be deprived of service, I want to cite some figures compiled in a survey which has been conducted in the so-called white areas by Napolitan Associates, a public relations and research firm with national standing. This organization was employed for the purpose of determining the acceptance of existing television reception in the homes of those so-called white areas.

Now, information available so far indicates that in the so-called white area 5½ percent of the viewers say they can watch only one channel. We were told it was a hundred percent of them before, now it is down to 5½. Of the 5½, 85 percent say they can watch only the VHF channel, channel 3. Of the 85 percent of the 5½ percent, 77 percent bought their first television set prior to 1957.

Now, in the fall of 1957 that VHF station went on the air, but these people all had television sets long before that. That indicates something.

Again, of the 85 percent of the 5½ or about 4½ percent of the total homes, 23 percent said they do, in fact, watch "The Untouchables," a program not carried on channel 3. And 29 percent said they do, in fact, watch "The Price Is Right," a program only available in this area on a UHF channel.

Now, there is more data available on this general subject, which is even more demolishing, but already we are obviously down to an insignificant number of people living in this vast and much advertised white area.

It is further revealing to find that some viewers who said they could only view one channel said that the channel in question was one of the UHF stations.

Now, this report in its entirety will be available shortly, and will be submitted to the FCC in the reply comments, which is where it belongs in the first place.

Our only conclusion is that the so-called white area is very appropriately labeled inasmuch as it is really only a mirage.

Now, Mr. Sibal asked the Chairman of the Commission, Mr. Newton Minow, when he was here the other day, if any consideration was being given in deintermixture proceedings to the public service record of the operators that were being deintermixed. I think some of you gentlemen may remember that question. And I think this is a notable thought, and it should be done. At the same time, I think consideration should be given to the public service record of the UHF operators. There is nothing to stop the VHF operator from performing a public service on the ultrahigh frequency to which he might be assigned. At the same time, it is very intriguing to note that this very point has been widely advertised, and the VHF operator that we have discussed here in Connecticut has done such a wonderful public service job that the Hartford Courant printed a front-page story not too long ago advertising what a wonderful service this station had rendereed in the great floods in Connecticut in 1955 to which Governor Dempsey referred to on Wednesday, and that was 2 years before the station went on the air.

Thank you, gentlemen.

The CHAIRMAN. We thank you for your presentation here.

Your statement, which you have made available to each member of the committee, will be included in its entirety in the record. The information which you have submitted with reference to presentations to the Federal Communications Commission on this matter will be received for the record, and such other information as you mentioned.

(The documents referred to are as follows:)

STATEMENT OF WILLIAM LOWELL PUTNAM

Gentlemen, my name is William Lowell Putnam. I am the chairman of the Committee for Competitive Television. In this capacity, I represent in large part the views of approximately 20 percent of the present commercial television broadcasters in the United States; namely, those who operate stations licensed between 470 and 890 megacycles. I am also a station operator in Springfield, Mass.

I have appeared before various committees of the Congress on a number of occasions in the past and have testified repeatedly before the Federal Communications Commission. There are assuredly enough witnesses who have appeared here and elsewhere in the past who have bored you with long recitations of self-serving irrelevancies; and I am aware of this tendium, so I will not hold your time any longer than necessary.

Before using my prepared text, I would like to offer a few additions and corrections to the testimony that will be presented here by some of the other witnesses that have appeared elsewhere in this matter. First, for Governor Collins, who speaks as president of the National Association of Broadcasters; The Governor is to be excused for his personal lack of acquaintance with much of the history and facts of television both as to the industry and the matter of allocations, for we must bear in mind that he has only held his present office for about a year and came to it with no prior background in the practices of this industry. Nevertheless, the statements that he makes get in your record and although we feel certain that he is not the type of man who would knowingly make any sort of misstatement, we should correct the record lest you base any decisions on erroneous data, such as was offered to the Senate.

The Governor stated a couple of weeks ago that there were no cases of UHF stations being denied network programs because of their being cornered by a single VHF station in some market. Unfortunately for the credibility of that point before that particular committee with Senator Pastore as chairman, we brought up the unhappy case of a station where this very thing occurred and which, when a second station came along in the VHF band, forced the demise of a UHF station operated by a Mr. Arcaro in the city of Providence, R.I.

The Board of Directors of the National Association of Broadcasters has voted to support the enactment of a bill to, in effect, make mandatory the fabrication of only all-channel sets. Yet the support of the NAB was based on a provision also being enacted which would prohibit the FCC from entering upon a program of selective or any other form of deintermixture. Here it becomes important to note that the television board of the NAB, which we are told represents some two-thirds of the commercial broadcasters in the United States, has not a single UHF man on it, and is, in fact, presided over by the archtype of station operators which should be deintermixed. Needless to elaborate, this decision by the NAB has gotten it into some considerable trouble with a good number of those station operators who had not already seen the light, thus a further wave of resignations is occurring. On another point in his testimony, Governor Collins pointed out that the only areas where UHF had trouble were those where they had been initiated against previously established VHF stations. We regret again that he has had words put into his mouth which I am sure a man of integrity would not have uttered had he been more aware of the record, for the position taken by the NAB totally ignores the fact that in many areas UHF stations began operation long before the VHF grants were made. But, like the proverbial bad driving out the proverbial good, the V's ultimately came along and the U's are no more, and this happened all the way from Portland, Maine, to Portland Oreg.

On another point, Governor Collins said that VHF signals are superior to UHF signals. Here, frankly, I doubt if the Governor really knows what he is talking about, for we have repeatedly asked him to visit a UHF area to obtain

some firsthand knowledge of this matter, and have yet to receive an acceptance. Yet even if he had not this inherent handicap to accurate knowledge, we suspect that he has been so effectively brainwashed by his board that the facts about ignition noise, airplane flutter, diathermy hash, and all manner of manmade disturbances which degrade VHF pictures, just have never been thought about. The basic problem in the position taken on this matter by the NAB and their blood brothers, the AMST, is that they insist on equating good propagation characteristics with service; and the two are not really the same, as many a politician has found to his dismay. The AMST representatives have told the Senate that people will have to tune to other States for television service if some few cities are deintermixed to all UHF as the FCC has proposed. These people have gotten intermixture confused with deintermixture, and have happily forgotten that presently, if the people, for example, of my hometown, Springfield, wish to watch a CBS program they have to tune to a station located in the State of Connecticut, whereas before this VHF station was slugged into our all-UHF area there was a CBS affiliate in Springfield. Or, if the people of Providence wish to watch the programs of one of the major networks they must tune to a station located in Massachusetts. It is further worth noting that the current deintermixture proposal of the FCC is designed to correct both of these problems. But, AMST would have you and everyone else believe just the opposite.

You see there is a difference between fact and testimony. So in addition to opposing deintermixture, the representatives of what are in effect licensed monopolies by coming before you and by pleading for a grandfathering clause are really opposing the all-channel legislation as well. The fact is that this group has opposed everything pertaining to television except the status quo.

Before the Senate this group quoted the FCC from as far back as 1955 to prove that deintermixture is a bad and erroneous policy, forgetting now that the FCC seems to have changed its mind in keeping with changing conditions. However, in the next breath they turned right around and said that the Senate committee report of 1958 was out of date. It all depends on what you are trying to prove, and let me assure you that AMST is trying to prove only that we've never had it so good. We might suggest that since the past record of the FCC in denying deintermixture is so consistent there is really no need to pass a law preventing it. But even if such legislation were necessary to prevent what AMST has described as the cancerous spread of UHF then let us merely enact a law which says that no new areas should be considered.

We do not know why these various associations urged you to make a law preventing the FCC from doing the job that the Communications Act tells them to do. We are inclined to suspect that these people are trying to get the Sherman Act repealed by legislation, now that the FCC has indicated it intends to move against these monopolies.

I would comment just briefly on the testimony before the Senate of Dr. Stanton of CBS who also is in favor of grandfathering, and if I had affiliates in seven markets being considered for deintermixture, I might find sympathy with his line of thinking. Dr. Stanton made much of the "unsettling" remarks in the text of the FCC order proposing deintermixture. Gentlemen, I would like to spend days telling you about unsettlement, for I have been a UHF operator for a long time and I can tell Dr. Stanton a lot about unsettling remarks. He fails to realize how unsettling it is for a station operator to be told, not that he must shift his frequency to one that gives the other guy a fighting chance, but that the CBS research people have proved conclusively that his market doesn't exist and is unnecessary for a national television system. For years CBS has said that the economy can only support 600 stations, and that major markets are the only ones that need television service and that UHF is absolutely no good, etc. You'll have to pardon me if I feel that Dr. Stanton doesn't really have my sympathy with being unhappy about two paragraphs in a 10-page docket for he doesn't know "beans" about unsettlement.

I would call to your attention that the honorable Congressman from the Second District of Massachusetts, Mr. Boland, has introduced legislation in the House at regular intervals, and at my request, for several years, the effect of which would be the same as the bill now before you. Mr. Boland is aware of the absolute need for UHF television if he is to have any opportunity to reach his constituents, for there is no VHF television available to him as so many Members of the House have begun to find out. Therefore, I am no stranger to this proposal, and it can easily be understood that I personally, corporately, and in my industry capacity, am in favor of this legislation. How-

ever, I am somewhat concerned by the tremendous, if highly qualified, support this proposal is now getting from those persons and interests who were formerly so cool toward it. To my mind it is quite clear that the people who have opposed the full development of a nationwide and competitive television service, and hence have opposed the development of UHF television so successfully for the past 9 years, cannot now be so strongly in support of this matter without having realized some gimmick that would make it meaningless. I am inclined to suspect, and if you don't join me in my suspicion I am surprised, that these latecomers, who now have so much religion, are out for no more noble purpose than they have ever been, namely the preservation of the status quo, somehow.

Now, gentlemen, we are admittedly a poor man's organization. We've only got a couple dozen station operators who can even afford to chip in a few dollars a month to this cause; so we cannot compete in the same ball park with those nationwide concerns who operate facilities that can only be compared to licensed piracy. So that you can have an idea of what the economic difference is in this matter, I am authorized to disclose to you that in 1 week of last January a VHF station operating in an otherwise UHF (as deduced from its published rates and a monitor of its commercials) had gross revenue of approximately $130,000; whereas two of the UHF stations which operate in the same area had total income of, for the same period, $25,000 and $27,000. And I should point out that the U's have been in operation for twice as long as the V in this area.

We in the UHF business can therefore cloak ourselves not in a false mantle of platitudes and mealymouthed "public interest," but only with commonsense, decency, and the traditions of fair play and free competitive enterprise that we like to tell our children are the traditions of our country. We cannot afford to hire expensive legal talent to present our case; we are stuck with me and as the records of the FCC bear out we who seek to bring to your attention the merits of expanding the usage of UHF are severely restricted in our ability to preach this gospel by the economics of unfair competitive handicaps which have afflicted UHF since the adoption of the sixth report.

Let me address myself, therefore, only to a couple of points. I will assume that we all agree that expansion of the television broadcasting industry is in the public interest; at least, we have all said so. And I would hate to be the political leader who had to report to his constituents that he worked to reduce the number of job opportunities available to his people. All we appear to argue about is the method of obtaining more television. The NAB and the AMST have indicated that they favor what they call the side-by-side approach. How they can do this with straight faces is beyond me, in view of the dismal record of side-by-sideness for the past 9 years; but as I have indicated facts are not too important to these interests.

In 1934 the Congress established a commission that was supposed to be expert in this field, and while I have ideas on this subject, I feel, as you will agree is proper, that the place for these comments is on the record before this duly appointed Commission, where all the story can be weighed, and not before town meetings, or State legislatures, where only one side of the picture is presented and all the facts are not brought out.

We are engaged in a project to bring more and better television to the people, and this battle must be fought consistently, not with a feint here and a withdrawal there. All-channel legislation is no substitute for fair competitive opportunity, and on this point I would elaborate for a minute. First, in order to have a reason for enactment of this measure we should have some UHF stations, and without deintermixture, soon and strong, we most certainly will not, save in one or two residual areas that people will shortly forget. Deintermixture is as important as the all-channel legislation, and after reading your report of 1958, it is obvious that you believe it also.

But look at another facet of this concept. This bill must first be enacted, and that may take some doing; and then it must withstand the test of the courts, and I hope that no one is going to be so naive as to assume that it won't be lengthily and laboriously due processed. Look at the record. In 1950 you passed a law the effect of which was to impose stiff penalties on the Communist Party as a group and its members as individuals; these are the avowed enemies of our entire society; * * *. Yet this law was held up in its effectiveness for 11 years, and this by the Communists. Now, gentlemen, your guess is as good as mine as to how long the capitalists can pull the same stunt. So, we have a bill, of which we all approve, or most of us do, which may be passed, and which certainly

will be challenged, and which will probably be upheld and which will then gradually be effective in obtaining receiver circulation for stations which will long since have gone dark. And by that time, no one will care for we will long since have grown accustomed to believing that what is good for general so-and-so is good for the country.

Frankly, I am sick of being told that UHF doesn't work, by people who don't know a thing about it. Some broadcasters employ high-priced engineers to draw fancy circles on maps and thereby prove conclusively that people cannot receive UHF signals, but fortunately for their peace of mind, the people thus being talked about are unaware of what the engineers have proved and so they go on watching television from the stations they cannot receive.

I would like to submit for your consideration a report prepared at the request of the Committee for Competitive Television, about which I am sure you have heard very little, for our propaganda organization leaves much to be desired. This was made by Prof. Dallas Smythe of the University of Illinois, formerly chief economist of the FCC, and deals extensively and absolutely honestly (differing thereby from so many reports that get submitted) with the matter of television channel acceptance and usage in the areas where the FCC actually has put deintermixture into effect. I am not able to answer any questions you may have about this report, for although I am the chairman of the committee that engaged Professor Smythe, I have met the man but once in my life, and have never discussed the content of this report either before its preparation or since. But, I do know that it contains much of a very revealing nature and would urge that if you take this subject at all seriously, you acquaint yourself with its contents.

Almost all parts of the United States receive some usable and reliable television signal, and the great preponderance of our people have more than one signal which they can tune to. While many have questioned the quality of the signals thereby utilized, the essential fact remains that people are tuning to what is available and often at considerable expense and effort.

Anyone who has traveled through rural areas all over the country has witnessed the extremely tall receiving antennas and complicated arrays that decorate every farmhouse in the Nation. Before this Congress, in years past, there was a great problem about the illegal boosters which enterprising people utilized to make viewable those signals from hundreds of miles away that otherwise were unusable in mountain areas. Community antennas or cable systems are a sign of this willingness to go to great lengths for television signals. On many cables, picture quality is poor; but in many instances that's all there is, and people are willing to pay great installation fees and in some cases, what amounts to fantastic monthly rentals, just to watch a poor picture. In all of these instances that I have mentioned, the effort is put into viewing a distant signal, for the people are unaware that there is a television allocation available within a few miles of every home in this Nation.

We are submitting at this time a list of certain allocations in a few States. We have selected only the more densely populated States because it is in such areas that allocations have obviously become a severe problem. This sort of problem will crop up in other areas as time goes by and the population increases.

We have noted the television service potentially available in their communities to the residents of various districts set apart for congressional election purposes and as defined in the Congressional District Atlas of the United States (published by the Bureau of the Census, April 1, 1960). In noting the allocations available in these districts we have drawn attention again to the fact that television coverage is not necessarily to be equated with service, particularly as it pertains to air time for local activities, local merchants, local news events, local needs, local personalities, and even local Congressmen.

Some extremely densely populated areas have television allocations which cover more than one congressional district and these are listed in column I. Some areas have but one VHF assignment and can thus expect only the continuation of monopoly into the future; these have been listed in column II. Finally, in column III we have listed all those districts in just these few States surveyed wherein local television service is utterly dependent on the furtherance or preservation of UHF television. I commend to your attention a comparison of this book with the table of VHF allocations, which I am sure the FCC will furnish to you. You will then know where your district stands in this matter of television service as opposed to coverage.

At the outset, I believe I do not need to defend the recent actions of the Federal Communications Commission before this body, for these are honorable

men who are trying to do an honorable job in the midst of a highly charged atmosphere. In order that you might understand how much charging there is in the atmosphere surrounding television allocations let me call to your attention an example of elementary but apparently unmentionable fact. In the city of Lancaster, Pa., there is a VHF station operating on channel 8 which has published rates of $1,200 per hour. Also licensed to operate and on-the-air in the same vicinity are UHF stations as follows: Channel 55 with rate of $325 per hour, channel 15 with rate of $500 per hour, channel 21 with rate of $500 per hour, and channel 43 with rate of $200 per hour. It should also be noted that three other UHF stations in communities far larger than Lancaster in the same general area are no longer operating. It should be remembered that one channel is able to charge for its time as much as three others combined. These financial statistics alone should indicate what is at stake in the Commission's deintermixture proposals. Let us not be deluded into thinking that those opposed to the Commission's rulemaking have the public interest at heart. They may talk about it, but have you ever known anyone to fight so hard for it.

I cite but this one instance for two reasons: First, this area is not being considered by the FCC under the proposals which have excited such turmoil and secondly, because this situation is typical of that in dozens of cities throughout the Nation.

In docket No. 11759 the Federal Communications Commission states:

"We note that the most recent financial reports filed with the Commission (1958) by the Fresno stations show that the gross revenues of the VHF station was 60 percent higher than one of the competing UHF stations and 35 percent higher than the other. These results reflect, and are explainable in large measure by, the kinds of competitive advantages which, as experience everywhere has shown, attach to VHF operation in competition with UHF stations."

On the one hand there are those station operators who have been given a license to shoot fish in a barrel for so long that they have forgotten how to work for a living in the American tradition. And on the other hand are those equally deserving American citizens who have been given licenses to operate frequencies that are theoretically equal to those of the barrel shooters, but due to a historical accident happen to be second class in these competitive instances.

I would like to draw attention to the comments often made by those who speak in the interests of what I call the barrel shooters. There is a group that calls itself the Association of Maximum Service Telecasters, but try to get hold of their membership roster or the minutes of their meetings. This group describes itself as "an organization of approximately 160 television stations, both large and small." I am not sure how the "small" gets into their description for no station that you or I would call small can qualify for their criterion of operating at the maximum permissible power limits prescribed by the FCC. But perhaps the word "small" is added so that you and I will think these people represent something other than the interests of would-be monopolists of great influence and endowment.

The representatives of this interest have told everyone that they are strongly in favor of the development of UHF; but they have never made this statement under oath, and they have so far successfully opposed every single petition before the FCC that has been aimed at the improvement of UHF television. Indeed, they are the champions of the status quo.

As proof of their interest in furtherance of UHF this group cites its support of legislation designed to encourage manufacturers to produce only all-channel television sets. Yet, gentlemen, tell me, have the people whose anguished outcries brought about these hearings, have these people ever been in touch with you to urge passage of such legislation; or do we all know the answer to that one? These people would have you believe, as they have tried to convince everyone else, that the ultimate in television service has now been reached: that this Nation needs only three channels in most major market areas, that the needs of educational television are being happily solved, that only the interests of national advertisers (as shown through the three networks) are important to the Nation, that the local interests of small businessmen are adequately served, that local issues in your districts are being given the attention by the most potent medium of our day that they deserve. These people would have you believe that everything is just fine in TV if you leave it alone.

These people will tell you that service is just fine. Yet tell me, gentlemen, how many of this committee can use this medium to reach your constituents—or in some areas has television suddenly been offered when it never was available before?

I will not burden you with a recitation of the practical results of deintermixture, for the files of the FCC will bear out that it has greatly aided in increasing service and competition, but I would like to incorporate here in your records a report on the matter by Prof. Dallas W. Smyths of the University of Illinois.

I regret that the public finds so much to criticize in the national television picture; and I join with Chairman Minow in stating that it appears that most of these failings of television can be traced to the artificial scarity of channels brought about by the failure to utilize the UHF.

Now, gentlemen, I feel safe in assuring you that there is no competent UHF operator of my knowledge who feels that the channel he utilizes is incapable of doing a good job of covering the area he is licensed to serve. But, when forced to operate in direct competition with a VHF channel, he is under a severe handicap which has been the subject of so much testimony before the Congress and the FCC that it would insult your intelligence to elaborate upon it further. However, I do think that your understanding of this entire matter would be clearer if you knew how this particular alphabet scramble came about.

Back in the beginning of things when people like Marconi began paving the way for people life Sarnoff who in turn are giving way to Minow—the total amount of usable radio spectrum was unknown. As uses of radio developed, people began to define the various frequencies, and using the metric system they somehow established a troika pattern.

There are the low frequencies which include all radio from the low audio to just below the present AM band. Then came the middle frequencies which extend up to 3 megacycles. Above the middle frequencies came the high frequencies which extend all the way to 30 megacycles. And then the very high frequencies up to 300 megacycles; followed by the ultrahigh frequencies to 3,000 megacycles and then we are into the superhigh frequencies and Lord only knows where it will stop as human needs and human ingenuity continue to find methods for use of the radio spectrum.

Thirty years ago no one in this Congress ever heard of VHF and thought of television only as some impractical laboratory scheme that would never be more than a plaything for scientists. Yet today we are concerned with activities a billion times higher in frequency than that first channel allocated to television; and we are here engaged in a great debate over how many channels shall be used in order to provide a multiplicity of programs and local service to the citizens of this country. There are people who would have you believe that, despite the facts, television won't work in the higher frequencies. Of course, these aren't the people who put Tiros or Samos or Midas or Enos into orbit, for with that tyep of thinking we wouldn't even have listened to Dr. Goddard. But such is the tradition of America, that we find ways to make things work.

Now, it so happened, as is quite logical, that the frequencies which were first noted to be usable were the first to be used. In the course of continuing demands for radio spectrum the FCC in this country has made assignments in the next available space, which always happens to be the next higher frequency from the last allocation. So it was in AM radio, back in days which only a few of us can remember, and so it has been with television.

The history of television allocations is fraught with jerry building. Four channels were assigned in the beginning of things, but channel 1 was removed very shortly because some other services needed that space. Two more were later added, but in the interim the space immediately above channel 4 has been assigned to other purposes so there is a gap almost as wide as that of a television channel between the present channels 4 and 5.

During the years just before and during World War II a great number of developments came along in the use of radio; FM channels were moved up and many of our air navigational aids were put into service. When television finally became something more than a laboratory dream and demand for channels began to increase, a great deal of space higher in frequency than the previous five channels had already been given over to other uses. And now we find television channels 6 and 7 are separated by a great space, so great, in fact, that channel 7 is over twice as high in frequency as channel 6—but you know, channel 7 works, and it works only because every television set in the country can tune to it.

We should note that some 15 years ago countless people within the industry pointed out that any channels higher than 6 just wouldn't work at all. We were told with impassioned fervor and offered absolutely conclusive proof by some of

the best names and wisest heads in the industry that the space presently occupied by channels 7 through 13 was incapable of utilization for television purposes, and the people who told us that this space wouldn't work are the same breed of cat who are busy proving today that channel 14 is no good.

The FCC assumed in 1946 that 12 channels would be sufficient to meet the needs of all the people for television service. The Commission didn't figure on what has developed. So, by the time the ultimate potential for a nationwide and fully competitive service became apparent, some more space had been allocated above channel 13. The next available space for more television happened to be in the part of the spectrum above that arbitrary number of 300 megacycles, which makes it ultra high.

Now there is no wondrous change that suddenly comes over the characteristics of radio waves at that number any more than there is at any other of the arbitrary numbers that I mentioned earlier. It is like voting districts, the boundaries are always arbitrary and similar people live on both sides of the line, but for certain purposes you draw these arbitary lines.

The history of commercial television usage for the last few years has been very effectively summarized by the Senate Committee on Interstate and Foreign Commerce in its report number 2769 where it says:

"When the FCC lifted the television freeze in 1952 and issued its sixth report and order, it made 1,875 commercial assignments and 252 educational assignments to the various communities of the country. Of these, 1,319 commercial assignments and 169 educational assignments are in the UHF band, so that this portion of the spectrum was clearly intended to constitute a major factor in our expanding television system. The Commission generally intermixed UHF and VHF allocations in the same communities, although many representatives of the industry warned that this was unsound and would place UHF stations at a competitive disadvantage. The Commission acted on the belief, held in complete good faith, that the role of UHF was going to be so important that stations operating in that band would shortly overcome the initial competitive disadvantages facing them.

"All of the experience since then has demonstrated that this basic assumption of the Commission was unsound. When the freeze was lifted in 1952 there were more than 17 million television sets in the hands of the public, none of which was capable of receiving the signal of a UHF station. The licensee of a UHF station was therefore required to try to persuade the individual set owners in this area to spend from $50 to $100 for a converter and special antenna simply in order to receive the signal of the new station. In order to provide an incentive from such expenditures the station operator needed network programing, but he soon found that this was not forthcoming until he had achieved a certain degree of conversion. In addition, despite efforts on the part of this committee, the manufacturers of television sets continued to devote the major part of their production to VHF-only sets, and the percentage of all-channel sets, which are slightly more costly, has steadily declined. The UHF operator has, therefore, never been able to reach all the sets in his area, except in regions where no VHF signals are available."

Now the FCC itself has stated in its docket No. 11759—

"The primary purpose of seeking to reduce competitive disparities among stations in the same market—insofar as they derive from the use of the different frequency bands—is not, of course, to improve or otherwise adjust the commercial opportunities of station operators, but rather to enhance the opportunities for the development of television service capable of filling the needs and interests of members of the public resident throughout the areas concerned.

"The competitive disparity between UHF and VHF stations is not based essentially or solely on the technical service potential of one type of facility over the other. It is rooted in factors beyond the control of the broadcaster, and manifestly derives from all of the experience accrued with UHF operation throughout the United States for the past 5 years, which is too familiar and has been too repeatedly stated and analyzed to require or warrant still another detailed elaboration herein.

"We need not labor this further. If there is one circumstance which has been established beyond doubt in the manifold experience of UHF operators everywhere that they compete with VHF, it is that, for a complex of familiar reasons related to receiver conversion, advertiser support, program availabilities and other related factors, UHF operations, however serviceable to the public, are subjected to competitive adversities which impose seemingly inescapable and

substantial burdens upon the chances for financially successful operations of a UHF service in competition with an available VHF service.

Now a great number of things have been said from time to time about the UHF channels by those people who know very little about the subject and who nevertheless pontificate at great length on this, or any other matter. You have had people come before you to talk about the UHF who represent manufacturers, you have had people come before you who have represented VHF operators, and they all tell you things about the ultrahigh frequency television band. Now I am not one to say that these gentlemen are not entitled to valid opinions, but I am here to tell you that I happen to know something about the ultrahigh frequencies, and I've gained all my knowledge the hard way. My company operates television channels from 14 to 81 and all the way stages and my stations operate in some of the ruggedest mountain country east of the Mississippi and furthermore for the most part we make a profit. I'll grant that we don't make a fantastic profit like those who oppose the Commission's recent proposals, and this, gentlemen, is a matter that I won't discourse on, but it bears very intensely on this entire subject. I am here to tell you that I know something about UHF and that those people who come here and talk from a wealth of inexperience on this subject are no more competent to tell you all about UHF than I am to tell you all about the Congress. I can tell you from having done it the hard way against what the FCC will attest have been pretty tough odds, that UHF can and does provide an excellent and very satisfactory means of serving "the public interest, convenience and necessity" and the records of the FCC will bear this out.

I can happily and truthfully assure you that expansion of UHF telecasting will mean more job opportunities within this industry—more local television service to the advantage of local business interests and local community needs—more educational television—more minority interest television and a fairer distribution of the national income of this great and growing industry.

The Commission recently converted Fresno, Calif., to UHF by transferring its sole VHF station to channel 30 and has proceedings underway to do the same to Bakersfield. As a result of these affirmative steps there has been a scurry of interest in UHF broadcasting in that general area. Applications are in for a new station in Fresno—the fourth—and a Bakersfield station to increase its facilities. Vesalia, which is 37 miles from Fresno and 65 miles from Bakersfield, has a new station. Hanford, which is 28 miles from Fresno and 68 miles from Bakersfield, has a new station. Tulare, which is 42 miles from Fresno and 58 miles from Bakersfield, likewise has a new station. All this has occurred since the area was deintermixed. Would anyone have dared to bring new UHF stations into these areas without the chance for success offered by these Commission actions? Four additional stations and an increase in facilities for another in this area is a quite impressive advance even for California. Any reasonable person can plainly see that this situtation can be multiplied by as many markets as are presently dominated by one or more VHF stations with the result that there could be more service for the people as these policies are extended to cover the Nation.

The statement is often made that it would be a terrible thing to force the people of some particular community to the expense of purchasing the additional tuner necessary to bring in the new channels. I would dwell on this one point only long enough to inquire of you by what distortion of fairplay is it right for our Government in the form of the Congress and the Commission to happily and knowingly force this apparently intolerable burden onto the people of the second district of New Hampshire and the second district of Massachusetts and not onto the people of the second district of New York or the second district of California? Why should just the people in some communities be forced to pay more in order to receive their local television service—one that will give a local advertiser an opportunity to reach his customers—one that will provide a means of expression to the religious and social needs of a community and indeed a television channel that will enable members of this Congress to speak to their own constituents at any time? By what distortion of fairplay is it right to say that some people should have to pay this allegedly intolerable price and others should not?

At the beginning of my testimony, I pointed out the extent to which some people go in order to receive a television signal into their homes. I do not know what some of these monstrous antenna arrays cost initially or in their frequent replacements. I do not know what the total annual cost of subscribing to a

community antenna system might be, but I do suspect that the vast majority of people living in these fringe areas would receive a far stronger signal from a station much more concerned with their welfare and at far less cost were the Congress and the Commission to further the development of local television service as it is possible only through the use of all the television channels. How else can these people ever receive the full benefits of television, or are we forever to think in terms of coverage, and never to concern ourselves with service?

There are those who for years have tried to say that UHF television won't work—or at best it only works in certain areas. Gentlemen, I appear before you as proof that this is so much hogwash—I've been studied from every angle for the past 9 years—at first I was a curiosity—a UHF broadcaster who was satisfied with his frequency. But you see I'm not like the people who have never tried apple pie and who therefore know they don't like it—I have tried UHF and it works. It works in western New England—where we have some interesting mountains and a dense population; it works in central Pennsylvania where the mountains are even more interesting; and it works in central California where there are no mountains at all, or trees either.

We should note that the capitals of many States have been allocated only these channels and have found them satisfactory. Here we should note Illinois, Kentucky, Pennsylvania, and New York.

In addition, though subject to the unfair competitive problem with which we are here concerned, the capitals of other States are presently served by UHF as follows: Alabama, Connecticut, South Carolina, Wisconsin.

And in the future, though presently without any local service, other States will be utterly dependent for local service to their capital cities on UHF and here we find the States of Florida, Louisiana, Maryland, Michigan, Missouri, Delaware, New Hampshire, Vermont, New Jersey, Washington.

This entire hearing which has taken up so much of your time and involved so much unnecessary turmoil is brought about by a very interesting situation, the true nature of which has never been honestly stated. You and I should be sufficiently honest, intellectually, to note that those who have come before you to protest the Commission's proposals are the operators of what in effect constitute licensed monopolies. Now a monopoly is something repugnant to the American way of life; you have made laws against such things. Yet a monopoly in the manufacture of tires, for example, is merely that, and a tire monopolist does not have inherent in his monopoly the mechanism for convincing people that his empire is beneficial to the public. Yet a monopoly in the dissemination of public information, even a limited monopoly, with geographic boundaries, is a very dangerous thing, and as we all have seen, can operate to the gross confusion of the public as to the facts and the actual course of events. Without this distortion by these monopolists this very hearing would not be held. For these people are not kidding themselves and they are not kidding me and I don't think they are about to kid you, either. Now there is one other point in this regard. We have witnessed here a number of officeholders—Governors, State representatives, mayors, and Congressmen of both bodies—who have found themselves in the ridiculous position, placed there by those who have deliberately told them only half the story, of struggling for the preservation of monopolies and the suppression of additional job and business opportunities for their constituents. This alone should convince you of the strength and concurrent evil of these monopolies in the dissemination of public information. Any politician knows that it is easy to confuse the voters—yet only a truly potent and monolithic force could confuse so many politicians.

The public has been confronted with half-truths. This "half the story" has confused many important people. It disturbs me greatly that people who supposedly operate continuously in the public interest should not only be party to this type of campaign, but actually initiate it. The greatest of the half-truths that the public has been allowed to believe regarding this deintermixture is that they are going to lose television service as a result of the Commission's proposals. Nothing could be further from the truth.

In every one of the areas proposed for deintermixture, the record is absolutely clear that there is a plentitude of television signals available—despite all the circles on maps that high-priced theoretical engineers have been employed to draw. The drawing of circles on maps is the broadcaster's favorite indoor sport, but unfortunately for the circlemakers, the people of this country go on watching television regardless of what the engineers say they can view

or not view. The fact is quite clear, and the records of the Commission are full of documentation on this score. If the present conditions of intermixture are allowed to persist, the public is not going to keep the service they presently have—for the UHF operators are not going to be able to continue.

Instead of having a multiplicity of service, the people will ultimately be reduced to but one station in all of these areas. The broadcasters who are immediately concerned and who have fought so hard against deintermixture, whose anguished outcries have brought about these hearings—these broadcasters are not going to be put off the air, nor is the public going to be deprived of programs they may enjoy. Instead, the public will tune to a different channel by means of which these same broadcasters can continue to provide the same programs and offer the same public service that they are so proud of. By this means, the people in these regions of the country will continue to have many services that will for the first time be competitively equal, instead of being gradually reduced in choice to the programs that are offered by but one station. While it's true that in some small areas people will lose VHF television service, it's also true that by a modest investment such as has already been made by millions in present areas served only by UHF, they will then have the choice of at least three television services. Were the Commission not to make these proposals, these people instead will forever be the victims of monopoly.

Much has been made in testimony of various people over the last 9 years that in large part, the financial failure of UHF operations has been due, first to excessive cupidity, and second to lack of business judgment on the part of those people who went into UHF in the first place. We would dwell on this subject for just a minute. Initially one should note that these statements again have been made by those who know absolutely nothing about the matter. But, as for cupidity, we believe that for sheer grasping greed the UHF operator does not even deserve to testify in the same hearing room with those who have willfully and continuously denied by pressure for excessive due process and repeated studyings, the benefits of a truly responsive and local television service, that would be something more to the people of this country than a mechanism for the enhancement of investors, the amusement of the masses and the advancement of national advertisers. And on the second item, since when is a person lacking in good business judgment who relies on the word of our Federal Government as expressed in the official statements of the FCC?

Throughout the long and painful history of repeated attempts to obtain some measure of support for the development of UHF television, there have been those who have talked about it in the most glowing of terms and I could quote them by the gross. But there have been very few who have done anything other than talk about the public interest. Mostly we seem to have been concerned with the private interests of a certain few who hold licenses supposedly in the public interest.

I would like to point out that it is interesting to note that those members of the FCC who have the longest continuous service on this body are those who have been voting to ameliorate the allocations problem by action; whereas, until recently those who are newest on this body have been the majority in favor of the preservation of the status quo in the apparent assumption that the present status of the television industry in this country is at or approaching the optimum. We note that this trend seems to have come to an end with the advent of Mr. Minow.

Now, gentlemen, I am not smart enough to come up with a lot of recommendations on this matter so I will content myself to quote from some of those who have been smart enough to see this problem in years past.

In 1958 the Senate Committee on Interstate and Foreign Commerce said:

"The committee agrees that an all-UHF television system would have many advantages. As pointed out by the Commission, such a homogeneous system based on completely contiguous channels would make it possible for stations to compete on a much more nearly equal basis than at present. Furthermore, after the necessary initial transition period, the problem of set incompatibility would be eliminated. Apparently the Commission is also of the opinion that single-band UHF receivers would be less costly and more efficient than present sets. The Commission notes that, as a byproduct of such a shift to UHF, at least the low-band VHF channels might be made available for other radio services, which are presently severely restricted and need additional frequencies.

"Also, it seems clear to the committee that the development of an all-UHF system would substantially promote the development of educational television.

The great majority of educational allocations throughout the country are in the UHF band. If UHF television does not survive, or survives only in atrophied form, large areas of the country will be deprived of an opportunity to have their own educational television stations.

"Substantial deintermixture in the very near future will provide areas of stable UHF television which can serve as the basis for a UHF holding operation until more long-range solutions—such as the possibility of shifting all television to UHF—can be more fully explored. This is vitally important, for otherwise UHF broadcasting may continue its present downward trend to the point where it ceases to be a significant part of our television system through the failure of more and more UHF operators. It will be hard for the Commission to convince the committee of its sincere interest in the possibility of an all-UHF television system if, while considering such a project, it provides no relief for UHF stations presently on the air, with the distinct probability that many of them might be forced to suspend operations.

"It should be made clear that although the committee sympathizes with the plight of those who have pioneered in UHF broadcasting and regrets the losses they have suffered, its conclusions as set forth in this report are not motivated by any desire to go to the economic rescue of these individuals. Rather, the committee is concerned with preserving UHF broadcasting as it exists today, insofar as that may be possible, so that the UHF frequencies will continue to be used and effectively developed to the point where they can occupy their proper and essential place in the total television picture. If in the process economic benefit inures to certain UHF licensees, that is simply an incidental result of policies which the committee feels are vital to the future development of American television. Conversely, if economic injury results to those who have applied for, or received, grants of VHF channels which are deleted in the process of deintermixing particular markets, that, too, is an unavoidable concomitant of the strengthening and preserving of UHF broadcasting for the benefit of the public generally.

"It should be noted that deintermixing selected markets to make them all, or predominantly, UHF not only strengthens UHF broadcasting, but as a by-product it also makes the one or more VHF channels deleted from a particular market available for possible assignments in surrounding predominantly VHF areas. Thus the VHF channels moved to preserve existing UHF operations may well be allocated to other markets to provide them with second, third, or fourth VHF stations. Thus deintermixture can improve the allocations situation in both directions.

"A special problem exists in communities which have only UHF allocations and have an existing UHF station, or an off-the-air UHF station, but are located well within the service area of a metropolitan market having three or more VHF stations. In such a situation there is, in the light of the testimony before the committee, serious doubt whether such a station can survive even without local VHF competition. Therefore, all that can seemingly be done to permit a local outlet in such an overshadowed community, under existing circumstances, is to provide some form of VHF facility.

"The committee will therefore closely watch the Commission's progress in achieving deintermixture. It hopes that the proceedings recently initiated will be concluded by the Commission with all possible speed, and that wherever it is found in the public interest deintermixture will be promptly effected. The committee further hopes that the Commission will act with like dispatch as to other petitions for deintermixture now pending, or hereafter filed, to the end that deintermixture be quickly accomplished on the widest possible basis. If the Commission ultimately decides on a major shift to UHF, the interim creation of all UHF areas will blend naturally into such an overall solution. If for any reason, however, the Commission finds such a shift to UHF impracticable, the existence of substantial and thriving UHF areas will operate to preserve the UHF band while the Commission seeks other means of achieving greater utilization of UHF.

"Deintermixture should be effected on as broad a basis as possible in order to make clear to the broadcasting industry, to advertisers and advertising agencies, and to the public that UHF is not only going to be maintined but expanded to assume its necessary place in our overall television system. In so doing, of course, long awaited encouragement will be given to many UHF broadcasters who are hanging on, despite severe losses, in hope that at long last something will be done for UHF besides talking about it."

That is all quoted verbatim from one group of persons which is active and has some grasp of the public interest. Now for another group, the House Committee on the Judiciary:

"It is incumbent upon the Commission to sustain this new regulatory tempo. There is too much at stake to permit the failure of the project as the Commission has repeatedly defined it. The American public is entitled to the fulfillment of the promise of television as a medium that will enable many communities to produce their own local programs, a medium that will provide the widest possible expression and exchange of ideas and information from multiple, diverse, and even antagonistic sources. It is entitled to a national television system that will not be dominated by two all-powerful networks. It is entitled to a system that will foster the growth of several competing national networks whose competition will assure that control of the chanenls of communications and the attendant power to dictate what the American public shall see and hear will never be concentrated in the hands of a few.

"The committee recommends that, pending the outcome of the proposed program of research and development concerning the feasibility of a major shift to UHF, the Commission vigorously press forward in its program of selective deintermixture, of which its reports and orders of February 26, 1957, are a partial result. The Commission should broaden this program to include many more markets, if feasible in the public interest, and should continue to order the removal or conversion of existing stations where the public interest requires. The committee will follow closely the pace and progress of the Commission's deintermixture program."

Let me thank the Senate Committee on Interstate and Foreign Commerce and the House Committee on the Judiciary for stating the case so clearly.

It should be noted carefully that the report of the Senate committee from which I quoted to you expressed grave concern for the future of educational television. Two-thirds of the channels reserved for education are in the UHF band. While educational broadcasting has made significant steps, the implementation of the assignments reserved for education continues at a snail's pace in our Nation's most critical era of teacher and classroom shortage. However, much of the hesitation by educational groups to commence broadcasting on channels 14 through 83 results from fears that UHF is not an effective medim. This impression stems from the many commercial failures in the utirahigh frequencies; and as we have shown, these commercial failures have hardly been the fault of the frequencies or the operators. Whether or not you sympathize with the judgment of educators in this respect, the facts are that 10 years have passed and only 20 UHF educational stations are on the air. This constitutes but 10 percent of the spectrum space expressly earmarked for education. To clarify that—if commercial UHF broadcasting is permitted to deteriorate further, educational television goes with it.

The Members of this Congress must be readily aware that the daily press (printed variety) of this Nation is a relatively tightly held industry. This great and original medium of expression and information is dominated by a few very influential personages or corporations. Surely, every one of us has at some time or other found that if we held opinions or made statements or even engaged in activities which were not to the liking of the persons who control the newspapers and news magazines, then our actions, opinions, and statements were either completely ignored or hopelessly distorted in presentation to the public by these media.

Now, such is not the case in the radio industry. Though there are many, and you should note well who they are, that complain that this industry suffers from too much competition, the fact is quite clear that radio serves what many of us really know to be the interest of the public. By this I mean, that it is clear the matter of adequacy of competition, the diversity and even antagonism of ownership and the localization of interest have brought about a great thing in this Nation. People have come to depend on their local radio station for local news, local advertising, and all forms of local service. Yet at the same time, the radio industry as we all know is not unavailable to the national needs of the entire American people.

The choice between which of these two paths to direct the television industry should never be in doubt.

APPENDIX

The tables that follow indicate the type of television service available in the congressional districts of 27 States. These States have been analyzed because their relatively denser population has already made television allocations a considerable problem in achieving a satisfactory degree of local service to the residents of the various parts of these States. While almost all parts of all States receive some television signal and are thereby entertained and informed on national affairs and are reached by the commercial messages of national and regional advertisers; in many of these areas no local service is available which can be utilized by local merchants or local officials on any but the rarest of occasions.

Following this explanation it appears there are four types of congressional districts:

1. Those which presently have at least two VHF services available.
2. Those which are but a part of a much larger metropolitan area served by many television stations, to any of which a Congressman becomes only a minority interest matter.
3. Those which have but one VHF allocation and in which districts the Congressman is dependent on the good will (however engendered) of the station owner for any opportunities to reach his constituents.
4. Those districts which may receive outside signals but which have no VHF allocations and which are dependent for any local television service on the development of UHF as proposed by the recent actions of the FCC.

It will be seen that all congressional districts fall into one of these categories; we have listed herein only the latter three types.

State	Metropolitan districts	Single VHF only districts	UHF districts
Alabama		2, 3, and 4	5, 6, 7, and 8.
Arkansas		1, 3, 4, and 6	2.
California	4, 5, 7, 8, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, and 26.	10 and 11	6, 12, 14, 27, and 29.
Connecticut		1 and 3	2, 4, and 5.
Georgia		6 and 8	4, 7, and 9.
Illinois	1, 3, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13.	16, 20, 22, and 25	14, 15, 17, 18, 21, 23, and 24.
Indiana		7 and 8	1, 2, 3, 4, 5, 9, and 10.
Iowa			4, 6, and 7.
Kentucky		1 and 2	4, 5, 6, 7, and 8.
Massachusetts	8, 10, 11, and 12		14.
Michigan	1, 13, 14, 15, 16, and 17	3, 10, and 5	1, 2, 3, 4, 5, 6, 7, 9, 13, and 14
Mississippi		3 and 5	2, 4, 7, 8, and 18.
Missouri	1, 2, 3, 4, 5, and 6	10	2.
New Hampshire		1	8.
New Jersey			2.
New York	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, and 25.	32, 34, 37, 33, 39, and 31	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14. 1, 26, 27, 28, 29, 36, and 43.
North Carolina		3, 4, 5, and 12	2, 8, 9, and 11.
Ohio	1, 2, 20, 21, 22, and 23	18	4, 5, 6, 7, 8, 10, 11, 13, 14, 15, 16, 17, and 19.
Oklahoma		3, 4, and 6	2.
Oregon		1	
Pennsylvania	1, 2, 3, 4, 5, 6, 27, 28, 29, and 30.	9, 20, 22, and 24	7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 23, 25, and 26.
South Carolina		2 and 6	3 and 5.
Tennessee		7	4, 6, and 8.
Texas		3, 6, 7, and 10	1, 4, and 9.
Virginia	1, 2, and 4	7 and 9	5, 8, and 10.
West Virginia		5	2.
Wisconsin		2, 3, and 9	1, 6, and 10.

The CHAIRMAN. Mr. Rogers of Texas?

Mr. ROGERS of Texas. I have one question.

Mr. Putnam, do I understand now that you are for 8031?

Mr. PUTNAM. I guess that is the number, I don't know all the numbers.

Mr. ROGERS of Texas. And you are also for deintermixture?

Mr. PUTNAM. Yes, sir; I sure am.

The CHAIRMAN. We gathered that from your statement.

Mr. Thomson?

Mr. THOMSON. Mr. Chairman, I am sorry I missed the first part of Mr. Putnam's statement.

I would like to ask you whether you described what the Committee for Competitive Television is.

Mr. PUTNAM. I know that is a point that you are interested in, sir.

Mr. THOMSON. Mr. Putnam, you didn't answer my letter on that subject, did you?

Mr. PUTNAM. No, sir, but I told you that I would be very pleased to come down and discuss it with you at any time, and I am pleased to discuss it right now.

Mr. THOMSON. That is my question.

Mr. PUTNAM. The Committee for Competitive Television is an organization supported in their prayers by almost all of the UHF operators that I know of. It is supported financially by about two dozen. It varies in varying amounts, because some of these people don't have the dough to support anything, hardly themselves. So that we have really two classes of membership, those that love us and those that pay us. I can, if you would like, get you a list of those that have actually contributed funds to this enterprise in the last year. The total that we have been able to collect and thus disperse principally in this survey by Professor Smythe, that has been the only thing we have really been able to pay for, has been so far about $2,500.

Does that answer your question, sir?

Mr. THOMSON. Who are other the officers and directors of the association?

Mr. PUTNAM. The treasurer is Mr. John English.

Mr. THOMSON. And what is the address?

Mr. PUTNAM. He is from Erie, Pa. He is on the list to testify here today in his own interest. Mr. English and I are the two officers, we have no others that hold official position at the moment. We have had other officers in the past, if you would like them, and our first chairman was Mr. John G. Johnson, who presently operates a station in Puerto Rico. He used to operate a UHF station in North Carolina, but things got to be too much for him.

Our former treasurer was Mr. Thomas Chrisman, of Norfolk, Va.

Mr. English used to be chairman.

And now we are stuck with me.

Mr. THOMSON. Would you give us an definition for competitive television?

Mr. PUTNAM. Yes, sir; it is the free ability to compete on the same terms with those in the same community.

Mr. THOMSON. Well, that would be the same wavelength, then, or the same signal?

Mr. PUTNAM. For practical purposes what it means is that you can't all operate on the same wavelength in the same community, but if you can operate in the same part of the spectrum, that is sufficient. There is no complaint among those areas where there are only UHF stations, for example, in Scranton and Wilkes-Barre, there is no complaint by one station operator on channel 28 that he is unfairly penalized against the operator on channel 16.

For practical purposes, the UHF channels are reasonably comparable one to the other. So are the VHF channels, if you see what I mean. There is no complaint by the operator on channel 13 that he is unfair vis-a-vis channel 2.

Mr. THOMSON. You are for complete deintermixture?

Mr. PUTNAM. Deintermixture certainly on a sufficiently broad scale to enable an economic area to be competitive unto itself.

Now, I am not saying that we should deintermix the whole country. Mr. Dominick would find that unnecessary, I am sure. And if I lived in Aspen I don't think I would be able to get a signal even from Carbondale. But there is no substantial amount of need to apply UHF television to the mountains of Colorado.

But in certain areas, this is the only way you are going to get competition.

Mr. THOMSON. Well, now, in the case of a community where there is a VHF station and a UHF station comes in later, would you apply your principle of competitive television to that community and ask that the VHF station be removed because the UHF couldn't compete?

Mr. PUTNAM. That is a very tacky area, sir, and there are a lot—I don't think you can draw a generalization on that. You must be aware of the old saw that all generalizations are false, including this one. It is impossible for me to give you a flat answer on that, because there are a lot of things that might mitigate one way or the other.

Mr. THOMSON. What about a UHF chain that buys a UHF station where there is an existing VHF station and then begins and joins your Committee for Competitive Television?

Mr. PUTNAM. People in Madison haven't paid a nickel.

Mr. THOMSON. Do you have any members in Wisconsin?

Mr. PUTNAM. In our prayers, perhaps, but we haven't gotten a nickel from them. But there is a difference between the building of the station originally and the purchase of it later. A lot of stations have been known to change hands. Sometimes voluntarily and sometimes unvoluntarily, the good Lord catches up with all of us sooner or later, and, therefore, a station is bound to have to change hands if its owner dies. So that, again, you can't draw a fast rule, there are mitigating circumstances on both sides of this.

I don't think that I could draw a rule, I don't think you could draw a rule that would apply to every community, it is a very hard thing to do. That is why you have a Commission that is supposed to look into these things and make determinations that in some areas it is a good thing and in others it is not.

Mr. THOMSON. Were you referring to the FCC when you said there is an unbiased body created by Congress to consider this matter?

Mr. PUTNAM. Yes, sir.

Mr. THOMSON. Would you put Commissioner Lee in that category?

Mr. PUTNAM. He is not the body, he is a Commissioner, there are six others. And in theory the total of the Commission should come out to be unbiased. This is the intent of the Congress, why you made a seven-man Commission, so that you couldn't get one person who is strong in one direction to run away with it.

Mr. THOMSON. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Moss?

Mr. Moss. I have one or two questions, Mr. Chairman.

As I read your statement, you are in favor of the all-channel receiver?

Mr. PUTNAM. Yes, sir—not that I believe it is a panacea, sir, I am not about to kid you, or me, or anybody else into thinking that this is going to really bring about overnight something great and wondrous, it isn't going to.

Mr. Moss. Now, let's take that statement.

Is there anything that is going to bring about overnight something great and wonderful?

Mr. PUTNAM. I don't think so. If we had started back in 1954 when there were first hearings held on this before Senator Potter——

Mr. Moss. If we had started earlier than 1954, we might not have the problems that we have today, but unfortunately we are faced with the fact that we must now today examine policies and determine the direction we will follow in the future.

Is deintermixing going to solve all of these problems overnight?

Mr. PUTNAM. I think side by side the two policies can do something. What I mean by this, sir, is that if we do not have deintermixture, pretty soon there will be no future in having all-channel legislation anyway, because there aren't going to be enough UHF operators who are going to survive, in my opinion, that long.

I know of a UHF station that is operating in the same community with a V right today that is getting weaker and weaker every day.

Mr. Moss. That isn't the only factor of importance in the competition within the same community between a V and a U?

Mr. PUTNAM. For practical purposes; yes, sir.

Mr. Moss. I am going to disagree with you very sharply. I happen to represent an area in this Congress that has had rather an interesting experience. We were well along in television. A great many of the people I now represent had these towering masts on their homes, including myself. I had one on my roof and I had a booster on it. I picked all of my stations out of the air from San Francisco, because the Commission waited a long time to assign anything to Sacramento. Then it came along and assigned channel 40 to Sacramento. And 40 became a vigorous station and a fine moneymaker. Subsequently channel 3 was licensed. For awhile channels 3 and 40 lived together quite successfully, each of them having a national affiliation. Then channel 10 came into being. And even under these conditions 40 was not a big moneymaker, but it was a successful station. Finally channel 13, which was supposed to be in another community, but which was well received in Sacramento, was given the third national affiliation. That was the thing that broke the back of the UHF channel 40.

Now, we had a very high percentage of conversion in that area. Can you say that it is impossible for a U to successfully compete even if it has a network affiliation?

Mr. PUTNAM. Yes, sir; I can, because what you are detailing in Sacramento is so if you look at part of it, but if you look at what really happens, you will find, if you analyze the month-by-month earnings of that UHF station, channel 40, that while they had the community all to themselves, so to speak, there was nobody to fight with them, and they did all right.

When KRCA went on the air, they began to drop right away, and they lost a great portion of their national business.

When channel 10 went on the air—in the meantime, channel 13 was operating in from Mount Diablo all the time, to some extent, which was again siphoning off some of the national income, because that station was trying to be the independent bay station as well, they were trying to cover the moon—when channel 10 came on the air that station lost practically everything, channel 40 lost practically every bit of national income, and began to lose almost all of their regional and local income. And the channel 13 move was really not the deathblow that it looked like, it looked like the deathblow, but in effect the station was already dead.

Mr. Moss. Let me make it very clear that when I say that the deathblow occurred at the point of the third network service, I am expressing statements made to me by the manager and the owners of that station——

Mr. PUTNAM. Yes, sir. But that was the straw, the fact that did it.

Mr. Moss. Who felt that without that they could have survived and continued to earn money.

Mr. PUTNAM. That is possible. But that is the final straw—the point I am getting at is that the record of income of the station showed a steady——

Mr. Moss. Aren't you guilty now of a degree of contradiction? You see, I am perhaps a tiny bit sensitive. You stated that the quality of reception was very good on UHF, and I agree. I have experienced as a viewer the quality of that reception. Now, you also took considerable time here to point out that there is no magic delineation that occurs between 13 and 14 or 13 and 20.

Mr. PUTNAM. Thank you for reading my statement, sir. That is the part I didn't read. I am glad you noted it.

Mr. Moss. I try to read it all.

Mr. PUTNAM. I appreciate that. Not everybody has taken that kind of pains.

Mr. Moss. You also point out that it was the early concern, when everybody wanted four or five or three or two, that seven would be unsatisfactory. Isn't your problem tied to the matter of the thinking, perhaps, of advertisers who want the V if it is available?

Mr. PUTNAM. You are absolutely right.

Mr. Moss. The network who seeks the V, if it is available, as an affiliate, and the lack of available sets in the community; it is not an uncomplicated problem.

Mr. PUTNAM. You ars so right, sir. I agree completely. There are a great number of variables. And what may be the detailed facts coming up to a conclusion in the Sacramento area can vary immensely from the detailed facts coming up to a conclusion, say, in Erie, or in Milwaukee, or you name it.

Mr. Moss. Let's go back to another statement you made. You asked why should people in a community be required to go out and be put to the expense of converting to receive all channels. And I agree that they shouldn't. But in advocating that, we proceed now with deintermixture as the ultimate solution to the problem——

Mr. PUTNAM. I don't say it is the ultimate; the Commission does.

Mr. Moss. The immediate solution, then, we will say.

Mr. PUTNAM. It is a palliative.

Mr. Moss. Well, each of those instances forces the people of a community to an immediate expenditure, the licensee to an immediate expenditure, without necessarily resolving the question of service. If the proposal of going slow on deintermixture and attempting to place in homes in the future sets that will make it possible to finally develop more television service is tried—this is the longer range approach; it is a more orderly approach, wouldn't you agree?

Mr. PUTNAM. Up to a point, sir. The point becomes this. Tell me about your set. Does it still have the UHF tuner on it?

Mr. Moss. In Sacramento?

Mr. PUTNAM. Yes.

Mr. Moss. Yes; it still has it on it.

Mr. PUTNAM. Do you have an antenna up on the roof?

Mr. Moss. Yes, I still have it on the roof.

Mr. PUTNAM. You are a rarity, sir. I was in Sacramento twice in the last couple of months, and I said to myself, "I want to count the UHF antennas," and I counted awfully few.

Mr. Moss. We hadn't very many stations to receive on UHF.

Mr. PUTNAM. I know. The point I am getting at, sir; having the tuner in your set is one thing, but having the antenna on the roof is another. The antennas are all over the country pulling in the V signals. And while in the fullness of time we may easily get all-channel sets all over the country, without an antenna to use with it, the station still has no viewing audience. And without the viewing audience, what difference does it make whether they can tune in or not?

Let me point out one other thing, sir: You said that the stations would be put to a substantial expenditure in order to convert. In the case, sir; of one station with which I am very familiar—and there are gentlemen behind me who are even more familiar with it—1 week's income will pay all the expenses.

Mr. Moss. What is your estimate of this cost of converting?

Mr. PUTNAM. Converting the station? Somewhat on the order of $150,000 plus or minus; it varies a little bit.

Mr. Moss. We have had some estimates here, I believe, from the Commission of around a quarter of a million dollars.

Mr. PUTNAM. It depends on how elaborate an installation you have to make. And I happen to know that, for example, in the case of WTIC, when they built their station in the first place, they wired up the building, their transmitter building to handle the power requirements of a megawatt station on UHF. So they have already—they are prepared for this mentally; they just don't want to admit it.

Mr. Moss. Do you concede that they would have to be put to the expense, perhaps, of some satellite stations in order to duplicate coverage in a community?

Mr. PUTNAM. Possibly. This requires a certain amount of study. It depends, again, on how much power they choose to radiate from

the main station. And an engineering survey would be in order to determine what area they might lose coverage in. However, we have constructed satellites for that purpose—I mean we, as UHF operators, have done it. So it is not an intolerable thing; it is something that can be done.

Mr. Moss. I am not underestimating the earning——

The CHAIRMAN. The Chair would like to interrupt, Mr. Moss, if he may. May the Chair again caution Mr. Moss and all the witnesses that we have got an awful lot of witnesses, and if we are going to take an hour arguing about each individual matter, if every witness is going to take an hour, we can't possibly accomplish our objective.

Mr. Moss. Mr. Chairman, with all due deference to the Chair, I point out that in the course of these hearings I have had very few questions.

I also point out that this is one of the few witnesses appearing in opposition to this legislation or in strong support of the policy of deintermixture, and one of the very few, to my knowledge, operators of a UHF station.

The CHAIRMAN. The gentleman may proceed. The Chair was calling attention to the fact that there are a lot of people here. But I will stay here until midnight if necessary.

Mr. DOMINICK. Would the gentleman yield on one point?

Mr. Moss. Surely.

Mr. DOMINICK. Is my understanding correct that in addition to having an all-channel receiver you must also have an antenna on your house to get UHF?

Mr. PUTNAM. Not necessarily; no more than you do to get VHF, but it varies upon your location.

Mr. Moss. It becomes a matter of variation in the characteristics of the operation in any type of transmitter, doesn't it?

Mr. PUTNAM. If you are far away you have got to have an outside antenna.

Mr. Moss. There is no magical line of delineation in quality of service or ability to render service, so we must view each operation individually.

Mr. PUTNAM. Yes, sir.

Mr. Moss. I think I will let the questions go at that point.

Mr. PUTNAM. Thank you very much.

The CHAIRMAN. Mr. Watts, group executive vice president of the Radio Corp. of America.

Mr. Watts, you may proceed.

STATEMENT OF W. WALTER WATTS, GROUP EXECUTIVE VICE PRESIDENT AND A DIRECTOR OF THE RADIO CORP. OF AMERICA

Mr. WATTS. My name is W. Walter Watts, I am a group executive vice president and a director of the Radio Corp. of America. I have been continuously associated with RCA for the past 17 years. I am in charge of the manufacture and sale of RCA's consumer products, which include television receivers.

RCA welcomes this opportunity to express its views on the legislation now before you, relating to performance requirements for television receivers shipped in interstate commerce. As the members of

this committee know, RCA has already submitted these views in writing to the Senate Committee on Commerce, and I request that a copy of this submission be included in the record.

The CHAIRMAN. It may be included in the record.

(The document referred to is as follows:)

RADIO CORP. OF AMERICA,
New York, N.Y., February 19, 1962.

The Honorable JOHN O. PASTORE,
Chairman, Subcommittee on Communications of the Senate Commerce Committee, Senator Office Building, Washington, D.C.

DEAR SENATOR PASTORE: The Radio Corp. of America has always supported the objective of the widest possible television service to the public through the full utlization of all 12 channels in the VHF band and all 70 channels in the UHF band. We, therefore, favor appropriate legislation to require all sets shipped in interstate commerce to be equipped with all-channel tuners.

While endorsing the aim of legislation designed to permit more Americans to receive a wide range of television programing, we have certain reservations concerning the mechanics of proposals to achieve it as presently embodied in S. 2109 and H.R. 9322.

We feel that S. 2109 as presently worded, provides too broad an authority to prescribe "minimum performance capabilities for apparatus designed to receive television pictures broadcast simultaneously with sound." This could open the door to regulation of the design of television receivers extending far beyond the objective of all-channel tuners on all TV receiving sets to be manufactured and sold in the future. We understand that requiring all sets to be equipped with all-channel tuners is the only purpose of this legislation.

In H.R. 9322, there is a provision requiring all television receivers shipped in interstate commerce to be equipped for all-channel reception. We support this provision. However, we feel it only proper again to point out that an economic burden would be placed on every television set purchaser by requiring all-channel tuners in localities where there are no UHF stations or where it may be years before UHF service is available.

The cost of an all-channel tuner is generally estimated at $30 at the retail level. The Congress should therefore consider the effect of a possible slowdown in television set sales resulting from the addition of 20 percent to the price of portable TV receivers, which currently represent approximately 60 percent of receiver sales.

This burden on the public would be substantially eased by removal of the excise tax from TV sets with all-channel tuners.

From the beginning of commercial UHF service, RCA has manufactured television receivers designed to receive UHF broacasts in areas where such service is available. We believe we have made a larger investment and more substantial technical contribution to the development of UHF than any company in the television industry, and we are eager to see the maximum possible employment of the UHF channels, together with the full continuation of the existing VHF service.

For these reasons, we favor appropriate legislation to require all sets shipped in interstate commerce to be equipped with all-channel tuners.

Sincerely,

ELMER W. ENGSTROM, *President.*

Mr. WATTS. It is our understanding that the purpose of this legislation is to require that all such sets be equipped to receive all television broadcast frequencies allocated by the Federal Communications Commission, including both VHF and UHF channels. We favor legislation that would achieve this objective.

RCA has always supported the objective of the widest possible television service to the public through full utilization of all broadcast channels, including the 12 in the VHF band and the 70 in the UHF band. The extent of this support is evidenced by the fact that RCA, in addition to its pioneering work on television as a whole, has spent

millions of dollars and hundreds of thousands of engineering man-hours in the development of UHF television over the past 18 years.

Our motive has been the realization, shared widely in the industry and recognized at an early stage by the FCC, that television service would have to find additional space for expansion beyond that afforded by the 12 VHF channels.

In 1945, the Commission tentatively set aside the UHF band from 480 to 920 megacycles for experimental television broadcasting and expressed the hope that those interested in the future of television would undertake experiments within this range. RCA and the National Broadcasting Co. promptly undertook tests at these frequencies. This marked the beginning of a long sequence of engineering and experimental projects by RCA and NBC, resulting in a very substantial contribution to the advancement of practical UHF television.

In 1948, when the FCC instituted hearings on a proposal for UHF broadcasting, RCA and NBC installed a complete UHF television system at what is now the Sheraton Park Hotel in Washington. Fifty home receiver installations were installed throughout the Washing area to check the results of the transmissions and to compare them with simultaneous VHF broadcasting.

In 1949, RCA and NBC built and began operation of an experimental commercial-type UHF broadcasting station at Bridgeport, Conn. This was a pioneering UHF station in the broadcast of commercial television programs on a regular schedule. Many manufacturers utilized the signals of the station as an aid in their development of UHF receivers and antennas.

In 1952, when the FCC issued its new allocation plan setting aside 70 UHF channels for television, the first commercial station to go on the air was KPTV in Portland, Oreg., equipped by RCA with the apparatus that had been used at the Bridgeport experimental station.

All through this period and subsequently, RCA engaged extensively in the development of improved UHF transmitters, transmitting antennas, and related broadcast equipment, as well as UHF television receivers. In 1953, we introduced a continuous all-channel UHF tuner which, in conjunction with the VHF tuner, provided complete coverage of all television channels.

This background of research, development, and encouragement of UHF television has continued to the present time, and has included the continuing manufacture and sale of UHF-equipped receivers, broadcast equipment, and field studies of UHF system performance.

Against this background of RCA's extensive pioneering and continued encouragement of UHF, we favor appropriate legislation to require all sets shipped in interstate commerce to be equipped with all-channel tuners.

While we endorse the aim of legislation designed to permit more Americans to receive a wider range of television programing, we do have certain reservations concerning the mechanics of proposals to achieve it as presently embodied in H.R. 8031 and H.R. 9322.

We feel that H.R. 8031 as presently worded, provides too broad an authority to prescribe "minimum performance capabilities for apparatus designed to receive television pictures broadcast simultaneously with sound." This could open the door to regulation of the design of televisions receivers extending far beyond the objective of all-channel tuners on all TV receivers to be manufactured and sold in the future.

In H.R. 9322, there is a provision requiring all television receivers shipped in interstate commerce to be equipped for all-channel reception. We support this provision. However, we feel it only proper to point out that an economic burden would be placed on every television set purchaser by requiring all-channel turners in localities where there are no UHF stations or where it may be years before UHF service is available.

The cost of an all-channel tuner is generally estimated at $30 at the retail level. We recommend, therefore, that the Congress consider the effect of a possible slowdown in television set sales resulting from the addition of 20 percent to the price of portable TV receivers, which currently represent approximately 60 percent of receiver sales.

This burden on the public would be substantially eased by removal of the excise tax from TV sets with all-channel tuners.

RCA believes that it has made a larger investment and more substantial technical contribution to the development of UHF television than has any company in the television industry. We are eager to see the maximum possible employment of the UHF channels. If all-channel receiver legislation is enacted, RCA will vigorously and wholeheartedly promote its objectives.

The CHAIRMAN. Thank you very much, Mr. Watts.

Mr. Moss, do you have any questions?

Mr. MOSS. Mr. Watts, you quote a $30 figure on these sets at retail?

Mr. WATTS. Yes, sir.

Mr. MOSS. What do you think would happen to that figure if all of the sets going through your assembly line were equipped with the necessary additional equipment for receiving all of the channels?

Mr. WATTS. On the basis of good business practice, sir, it would not change very much. At the present time we do not recover the full cost of the UHF tuners that we put on our sets. So we are, in effect, subsidizing this to a certain extent now.

I would venture to say that there would be some reduction. But not of a substantial magnitude such as cutting the price in half.

Mr. MOSS. As I recall the figures given us by the Commission, approximately 6 million sets were sold last year.

Mr. WATTS. That is correct.

Mr. MOSS. And approximately 6 percent of those sold were all-channel receivers?

Mr. WATTS. Approximately correct.

Mr. MOSS. So we have a figure of about 360,000 all-channel receivers produced in the last year.

Mr. WATTS. Yes, sir; that is correct.

Mr. MOSS. The advantage gained by volume there you feel would not result at this time in a substantial reduction in cost?

Mr. WATTS. I think it would result in a reduction, but I don't think it would be of the magnitude that you would normally expect because, I repeat, the margins we add at the present time are far below the normal margins we require to run a profitable manufacturing business.

Mr. MOSS. That is all the questions I have, Mr. Chairman.

The CHAIRMAN. Mr. Dominick?

Mr. DOMINICK. Mr. Watts, what do you think would happen to the present VHF sets if this legislation should pass?

Mr. WATTS. The present VHF sets?

I think that if this resulted in the encouragement of more UHF broadcasting that you would find people buying converters or finding some other method of receiving UHF. They would either trade in their current set, or find a conversion method to receive the single or two or three local channels.

Mr. DOMINICK. What, in your opinion, is the advantage in having all-channel receivers as opposed to having VHF with the right of a person to obtain a converter or strip?

Mr. WATTS. If I fully understand what I think is the objective of your legislation, you won't accomplish it by what is implied in your question. If you wish to have all-channel capability in the receiver when it leaves the factory, then you can't open the door to not having it.

And it is as black and white as that.

Mr. DOMINICK. Well, maybe I didn't put my question clearly.

At the present minute all VHF sets can be converted at approximately the same price that it would cost to make an all-channel receiver, therefore what is the advantage in having this legislation?

Mr. WATTS. You can't force the consumer to spend that money. You are forcing the consumer to spend that money by this legislation.

Mr. DOMINICK. In other words, you are in favor of legislation that would force the consumer to spend more money on the television set?

Mr. WATTS. If in the opinion of Congress this is the only way that you can achieve the objectives that you are seeking, then we endorse it and will wholeheartedly cooperate.

Mr. DOMINICK. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. O'Brien?

Mr. O'BRIEN. Just one question.

Have you estimated, sir, what the cost to the Government would be if we removed the excise tax from TV sets of all types?

Mr. WATTS. I do not have the figures right at hand, but my recollection is that it is aproximately a standoff.

Mr. O'BRIEN. A standoff?

Mr. WATTS. Yes.

Mr. O'BRIEN. What do you mean?

Mr. WATTS. The 10 percent excise tax on a $300 receiver.

Mr. O'BRIEN. In other words, it would be six million multiplied by $30, would that be right?

Mr. WATTS. Well, you have to take the average price now. As I said, 60 percent of the sets are being sold in the portable category, and that price is in the hundred and sixty to seventy dollar range.

Mr. O'BRIEN. Are you suggesting that we remove the excise tax only from the portables?

Mr. WATTS. No, I think you have to do it all the way. I just mentioned that because this is the place where the television industry is having its greatest prosperity today, and the extra cost as a percentage of the cost of a portable receive is greater. It isn't nearly so much a factor when you are talking about a four to five hundred dollar receiver as when you are talking about a hundred and sixty to seventy dollar receiver.

Mr. O'BRIEN. I thought the record should get some indication of what the possible loss of revenue to the Government would be. I may

be wrong, but would it be fair to say that it would be somewhere between $150 and $200 million a year?

Mr. WATTS. I think you could multiply it out that way.

Mr. O'BRIEN. Thank you, Mr. Watts.

The CHAIRMAN. Mr. Sibal?

Mr. SIBAL. Mr. Watts, what is the average life use of a television set?

Mr. WATTS. The average life of a television set?

Mr. SIBAL. Yes.

Mr. WATTS. Five or more years. Six or seven years is the figure usually accepted.

Mr. SIBAL. Six or seven years?

Mr. WATTS. Yes.

Mr. SIBAL. So would it be your feeling that this is the approximate time to take for essentially equipping the American homes throughout the country with all-channel receivers if this proposed legislation should go into effect?

Mr. WATTS. I think you have a number of factors that you have to consider there. Right now, as I think everyone is aware, we are enjoying a very substantial increase in the sale of color receivers. If the public is going to buy substantial quantities of color receivers, then they are going to trade in their existing receiver on something new. So this would all be part of the transaction.

Mr. SIBAL. So it might very well be a short period?

Mr. WATTS. Yes, it could be.

Mr. SIBAL. Particularly if UHF transmission developed which would make it—which would stimulate people——

Mr. WATTS. I think I implied earlier that if this legislation gives encouragement to broader and improved UHF broadcasting, then I think the public has an incentive to trade in what they have for something new.

Mr. SIBAL. What is your feeling about the ability of UHF receivers to receive a good image without a roof antenna?

Mr. WATTS. I think I share the view of the previous witness that this is a thing that you cannot decide except on the test of an individual case. There are plenty of instances where you cannot receive VHF with an indoor antenna and you must have an outdoor antenna. And there will be the same situation with respect to UHF.

In general, however, especially in the fringe areas, you will require an outdoor antenna for UHF in more cases than you would for VHF.

Mr. SIBAL. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Moulder?

Mr. MOULDER. Mr. Chairman, I just want to pursue one point raised by Mr. Dominick.

I didn't clearly understand your response to his question. On page 4 of your statement you say:

> We feel that H.R. 8031 as presently worded has too broad an authority to prescribe minimum performance capabilities designed to receive television pictures broadcast simultaneously with sound.

He asked you—I believe this was the purpose of his question—Could the equipment be designed so that it could optionally be received without instruction, and be installed by the retailer?

Did I understand you to say that it couldn't be so designed?

Mr. WATTS. The two things are separate questions.

We feel, in reference to this clause, that if the purpose of the legislation is to provide all-channel tuners, it ought to confine itself to that, and it should not have such a broad catchall that it can cover almost anything you can conceive of with respect to design, which would go way beyond all-channel tuners that could get into the specifications of tube sizes, dial lighting, and so on and so forth.

The CHAIRMAN. Mr. Collier?

Mr. COLLIER. One question, if I may, Mr. Chairman.

Mr. Watts, what percentage of the television sets that are rolling off the assembly lines of RCA are equipped with the all-channel receiver?

Mr. WATTS. As you know, the industry reports through the Electronics Industries Association its sales of sets by categories. And there are figures that are published that show the total number of sets shipped from the factory equipped for UHF. Therefore, any manufacturer who knows his own production can compare his percentage against the percentage of the total industry. He doesn't know what makes up the balance. In every year, from 1954 through 1961, the RCA percentage has been higher than the industry average.

Now, I think you raised the question, you stated that it was around 6 percent.

Mr. MOSS. That was the figure given by the FCC.

Mr. WATTS. Yes. Our percentage in 1961 on that basis was 7.8, plus the fact that a substantial number of our sets were converted in the field, because we have them so designed that our distributors can add an all-channel tuner.

Mr. COLLIER. Mr. Watts, I asked the question—it is unimportant in the point that I am pursuing as to whether it is 6, 7, or 8 percent.

Mr. WATTS. Yes, sir.

Mr. COLLIER. As a manufacturer, in the process of manufacturing, the determination of what you manufacture is, I presume, based upon the public demand; is that correct?

Mr. WATTS. That is correct.

Mr. COLLIER. That being the case, and if there are, let's say, 7 percent of the television sets manufactured by all of the television manufacturers which have all-channel receiving equipment, would it be a fair statement to say that this percentage is a result of the public demand?

Mr. WATTS. Yes; I think that is pure economics.

Mr. COLLIER. By the same token, then——

Mr. WATTS. I might say you have to add to that the number that were converted in the field, and the number of people in the field who bought the set and then bought a converter for the UHF. I have no way of knowing what those numbers are.

Mr. COLLIER. Then the buyer in the final analysis is always left with the choice of determining what he needs?

Mr. WATTS. As it now stands, but as is proposed in this legislation that would not be the case.

Mr. COLLIER. If this legislation passes, as you point out, actually what we are doing or would be doing is forcing a man to buy something he doesn't need and doesn't want. Is that correct?

Mr. WATTS. That is what you were doing.

Mr. COLLIER. Through Federal legislation?
Mr. WATTS. That is correct.
Mr. COLLIER. Thank you.
That is all, Mr. Chairman.
The CHAIRMAN. Mr. Younger?
Mr. YOUNGER. Mr. Watts, do the majority of the TV manufacturers share the same views as the RCA?
Mr. WATTS. I have no way of knowing what the views of the rest of the manufacturers are. I believe that you are going to have a later witness from the Radio Manufacturers Association, and I think they can better answer that question than I can.
Mr. YOUNGER. Is RCA a member of that organization?
Mr. WATTS. Yes, sir.
Mr. YOUNGER. What is the position of RCA on the deintermixture?
Mr. WATTS. I am afraid that you are in an area in which I am not competent to express an opinion. I am a manufacturer of receivers. You are now in an area of the broadcast industry, in allocations, and I do not have enough knowledge and background to answer it.
Mr. YOUNGER. If we pass this legislation for all-channel receivers, will RCA manufacture nothing but all-channel receivers, or will you continue to manufacture some receivers capable of receiving only VHF for sale in the State where your manufacturing plant is located?
Mr. WATTS. I doubt if that would be an economic answer. I think that the economies of manufacturing all sets alike would outweigh the advantages of trying to make a special set for the State of Indiana, because our sets are all made in Indiana. I would have to study that, but that is a quick answer.
The number that are sold in Indiana would be so small that it would be a special tooling job and a special production line, and I think what it cost you to start up to do it would be offset by the saving that would be made by running one consistent thing.
Mr. COLLIER. Would it be feasible to manufacture a set with the all-channel receiving equipment that could be removed in order to qualify under the law to ship in interstate commerce, and then have the buyer who didn't need the unit be able to send it back to the company for a refund?
Mr. WATTS. That, I think, would get so involved that it would be impossible.
The CHAIRMAN. Mr. Springer?
Mr. SPRINGER. No questions.
The CHAIRMAN. Mr. Watts, the Commission demonstrated the other day two little boxes. One was the gadget that goes into the receiving set for VHF reception, and the other one was a smaller one for receiving UHF. Has there been any scientific progress made that both could be included in one gadget so that the gadget would receive both?
Mr. WATTS. I think that it is technically possible. And, again, this is a matter of economics. I think that possibly if this legislation were passed that you would find our engineers and the engineers of the industry working toward that end. It hasn't been done up to date because of the situation.

The CHAIRMAN. But you think scientifically it could be done?

Mr. WATTS. I am sure that it can be done.

Now, economically, I don't know until we have a chance to make engineering and manufacturing analyses of the costs of doing it that way.

The CHAIRMAN. It just occurred to me that if that can be done, they are ultimately going to come up with one that will cost just about what they cost today.

Mr. WATTS. Mr. Chairman, I have here the chief engineer of the Set Division of RCA, and, with your permission, we can see if he wants to elaborate on the answer that I have given.

The CHAIRMAN. Gentlemen, I would be glad to have his comments on it.

Mr. WATTS. Mr. Earl Anderson.

The CHAIRMAN. Will you identify yourself for the record?

I think it probably is one of the most important questions in this whole field.

STATEMENT OF EARL ANDERSON, CHIEF ENGINEER OF RCA HOME INSTRUMENTS DIVISION

Mr. ANDERSON. My name is Earl Anderson, and I am chief engineer of RCA Home Instruments Division.

With respect to a combined tuner, as Mr. Watts has pointed out, we in RCA have been very active in the field of UHF ever since its inception. We have never stopped work. We have had work going on continuously.

We, and I believe all of the industry, felt, as I am sure you felt when you asked the question, that it ought to be cheaper and easier to make one box which would receive both UHF and VHF. And so this has been pursued. We have pursued it, and many other companies in the industry have, also.

I know of nobody who has produced a device so far which meets the technical requirements for the two services as well as separate units do whose cost is equal to or less than the cost of the separate devices.

The CHAIRMAN. Let's just separate the two things now, and let's talk about, if you will, sir, whether it can be done.

Mr. ANDERSON. It is possible.

The CHAIRMAN. It would seem to me, with the engineering capabilities of your company and others in manufacturing television sets, if it is technically possible to do so and if legislation requires all-channel receiving sets, then you are going to come up with it. And I would say to you, sir, I have confidence that it can be done. You know now that it can be done. It may be that you will have to perfect it in the future. But I have enough confidence in our engineers, that you can do it. It is possible that ultimately this will not involve any additional cost.

Mr. ANDERSON. Well, thank you for your expression of confidence.

We engineers are a reasonably self-confident lot, I think. We think we can do almost anything, and we can.

The question here is not whether it is possible or not, but one of economics. And so far the economics haven't come out right.

Now, I am not saying that they will not come out right, but so far they have not.

The CHAIRMAN. You certainly will keep working on it, won't you?

Mr. ANDERSON. We have been working on it continuously. But one of the problems is that when you move from VHF into the UHF range, you go through what amounts to a break point. The tubes, the active devices which work well over the VHF channels do not operate in the UHF channels. So you have to switch to different kinds of devices. And it is this switch in devices plus the fact that UHC-tuned circuits are so very small and such extreme precision is required that the mechanism for switching from one to the other gets complicated, the devices don't match, you use different ones in the different places that makes the combination exceedingly difficult.

The CHAIRMAN. Do you have separate devices on AM and FM receiving sets?

Mr. ANDERSON. In general, yes; in the sense that we are talking about here, the AM tuner and the FM tuner are essentially separate units.

The CHAIRMAN. Even though they are contained in the same receiving sets?

Mr. ANDERSON. That is right.

The CHAIRMAN. How much more does a receiving set cost with both AM and FM?

I know you can't answer that question, because if you get one of these little table radios I suppose it would be one thing and if you get a console I suppose it would be another.

Mr. ANDERSON. FM is substantially more expensive than the AM part. If you have an FM radio and want to add AM to it, it is relatively inexpensive percentagewise. If you start with an AM set and wish to add FM to it, then it is quite expensive.

The CHAIRMAN. Thank you very much.

Now, Mr. Watts, you have suggested that the proposed legislation, H.R. 8031, is too broad. I would be inclined to share that view myself. You have some outstanding legal people in your organization, too.

Would you undertake to develop what you think should be included in the legislation to meet this objective and give it to the committee for the committee's consideration?

Mr. WATTS. I think that I have inferred before that if the object here is to provide all-channel capability and receivers, then the legislation ought to require that and nothing more.

The CHAIRMAN. Yes. And that is the reason why I am suggesting to you that you take it up with your legal department and provide language.

Mr. WATTS. Mr. Chairman, I have also here Mr. Robert L. Werner, executive vice president and general attorney of RCA, and I am glad that he is hearing your words firsthand. I will take your suggestion under advisement.

Mr. YOUNGER. Will the gentleman yield?

You don't have Mr. Sarnoff with you, too, do you?

Mr. WATTS. No, sir.

The CHAIRMAN. You wouldn't mind undertaking that, would you?

Mr. WERNER. I should be glad to. I shall work with Mr. Borchardt, which I assume you would prefer that I do, work with the staff.

The CHAIRMAN. It is all right with us.

I thought it would be helpful to the committee if we had suggestions from those of you who are in the business as to what you think is necessary, so that we do not meet the criticism of the legislation being too broad.

Mr. WERNER. I should be glad to undertake it.

Mr. DOMINICK. Would the gentleman yield for one question?

The CHAIRMAN. Yes.

Mr. DOMINICK. Thank you, Mr. Chairman.

Perhaps I am under some misapprehension. If you have a VHF set and you put a converter on it to take UHF, can you still get VHF on that set?

Mr. WATTS. Yes.

Mr. DOMINICK. Thank you.

The CHAIRMAN. Mr. Watts, thank you and your associates. If you wish, you may file your prepared statement for the record at this point.

(The statement of W. Walter Watts follows:)

STATEMENT OF W. WALTER WATTS, GROUP EXECUTIVE VICE PRESIDENT, RADIO CORP. OF AMERICA

My name is W. Walter Watts. I am a group executive vice president and a director of the Radio Corp. of America. I have been continuously associated with RCA for the past 17 years. I am in charge of the manufacture and sale of RCA's consumer products, which include television receivers.

RCA welcomes this opportunity to express its views on the legislation now before you, relating to performance requirements for television receivers shipped in interstate commerce. As the members of this committee know, RCA has already submitted these views in writing to the Senate Committee on Commerce, and I request that a copy of this submission be included in the record here. It is our understanding that the purpose of this legislation is to require that all such sets be equipped to receive all television broadcast frequencies allocated by the Federal Communications Commission, including both VHF and UHF channels. We favor legislation that would achieve this objective.

RCA has always supported the objective of the widest possible television service to the public through full utilization of all broadcast channels, including the 12 in the VHF band and the 70 in the UHF band. The extent of this support is evidenced by the fact that RCA, in addition to its pioneering work on television as a whole, has spent millions of dollars and hundreds of thousands of engineering man-hours in the development of UHF television over the past 18 years.

Our motive has been the realization, shared widely in the industry and recognized at an early stage by the FCC, that television service would have to find additional space for expansion beyond that afforded by the 12 VHF channels.

In 1945, the Commission tentatively set aside the UHF band from 480 to 920 megacycles for experimental television broadcasting and expressed the hope that those interested in the future of television would undertake experiments within this range. RCA and the National Broadcasting Co. promptly undertook tests at these frequencies. This marked the beginning of a long sequence of engineering and experimental projects by RCA and NBC, resulting in a very substantial contribution to the advancement of practical UHF television.

In 1948, when the FCC instituted hearings on a proposal for UHF broadcasting, RCA and NBC installed a complete UHF television system at what is now the Sheraton Park Hotel in Washington. Fifty home-receiver installations were installed throughout the Washington area to check the results of the transmissions and to compare them with simultaneous VHF broadcasting.

In 1949, RCA and NBC built and began operation of an experimental commercial-type UHF broadcasting station at Bridgeport, Conn. This was a pioneering UHF station in the broadcast of commercial television programs on a regular schedule. Many manufacturers utilized the signals of the station as an aid in their development of UHF receivers and antennas.

In 1952, when the FCC issued its new allocation plan setting aside 70 UHF channels for television, the first commercial station to go on the air was KPTV in Portland, Oreg., equipped by RCA with the apparatus that had been used at the Bridgeport experimental station.

All through this period and subsequently, RCA engaged extensively in the development of improved UHF transmitters, transmitting antennas, and related broadcast equipment, as well as UHF television receivers. In 1953, we introduced a continuous all-channel UHF tuner which, in conjunction with the VHF tuner, provided complete coverage of all television channels.

This background of research, development, and encouragement of UHF television has continued to the present time, and has included the continuing manufacture and sale of UHF-equipped receivers, broadcast equipment, and field studies of UHF system performance.

Against this background of RCA's extensive pioneering and continued encouragement of UHF, we favor appropriate legislation to require all sets shipped in interstate commerce to be equipped with all-channel tuners.

While we endorse the aim of legislation designed to permit more Americans to receive a wider range of television programing, we do have certain reservations concerning the mechanics of proposals to achieve it as presently embodied in H.R. 8031 and H.R. 9322.

We feel that H.R. 8031 as presently worded, provides too broad an authority to prescribed "minimum performance capabilities for apparatus designed to receive television pictures broadcast simultaneously with sound." This could open the door to regulation of the design of television receivers extending far beyond the objective of all-channel tuners on all TV receivers to be manufactured and sold in the future.

In H.R. 9322, there is a provision requiring all television receivers shipped in interstate commerce to be equipped for all-channel reception. We support this provision. However, we feel it only proper to point out that an economic burden would be placed on every television set purchaser by requiring all-channel tuners in localities where there are no UHF stations or where it may be years before UHF service is available.

The cost of an all-channel tuner is generally estimated at $30 at the retail level. We recommend, therefore, that the Congress consider the effect of a possible slowdown in television set sales resulting from the addition of 20 percent to the price of portable TV receivers, which currently represent approximately 60 percent of receiver sales.

This burden on the public would be substantially eased by removal of the excise tax from TV sets with all-channel tuners.

RCA believes that it has made a larger investment and more substantial technical contribution to development of UHF television than has any company in the television industry. We are eager to see the maximum possible employment of the UHF channels. If all-channel receiver legislation is enacted, RCA will vigorously and wholeheartedly promote its objectives.

Mr. Springer?

Mr. SPRINGER. I ask unanimous consent to place in the record at this point the statements of William W. Allen, secretary of information, Illinois Agricultural Association, which represents 196,000 farm families in Illinois, and a half million rural Illinois residents.

And I ask unanimous consent to insert in the record at this point an article, "Some Comments on the Technical Realities Concerning Television Allocation" by George R. Town, dean, College of Engineoering, Iowa State University, and William L. Hughes, head of the School of Electrical Engineering, Oklahoma State University.

The CHAIRMAN. Without objection, the statements will be included in the record.

(The documents referred to are as follows:)

STATEMENT OF WILLIAM W. ALLEN, SECRETARY OF INFORMATION, ILLINOIS AGRICULTURAL ASSOCIATION

My name is William W. Allen, Bloomington, Ill., secretary of information of the Illinois Agricultural Association. The Illinois Agricultural Association is a general farm organization representing 196,000 Farm Bureau families in Illinois. This represents approximately 500,000 rural Illinois residents.

Several pieces of legislation are being heard in this committee, most of which deal, in some way or another, with transforming selected communities which now have both UHF and VHF stations to all UHF telecasting.

The association which I represent here has no official position on the all-channel receiver legislation except as it affects future practices which might lead to deintermixture. In view of the fact that our present concern is for those living in rural areas, we oppose reassignment of VHF channels to all UHF.

The Illinois Agricultural Association, on behalf of its members, is concerned by the proposal of the Federal Communications Commission to take WREX-TV, channel 13, Rockford, away from the people of northern Illinois and WCIA, channel 3, Champaign, away from the people of central Illinois and to assign both stations to a UHF channel.

The association feels strongly that UHF channels substituted for WREX-TV, channel 13, Rockford, and WCIA, channel 3, Champaign, would result in a substantial loss of service to farmers in these areas.

Specifically, some of the farmers whom we represent would be left without any television service at all if these two stations were to be reduced to UHF.

About 31 percent of the membership of the Illinois Agricultural Association is in the viewing area of WCIA, channel 3, Champaign, and about 17 percent of the membership of the Illinois Agricultural Association are served by WREX-TV, channel 13, Rockford. If these two stations were to be reduced to UHF transmission, large numbers of these people would be denied dependable television service.

In the case of WCIA, channel 3, Champaign, farmers in the following countries would be denied service if WCIA should become a UHF station: Livingston, Iroquois, Coles, Cumberland, Effingham, Fayette, Shelby, and Montgomery.

In the case of WREX-TV, channel 13, Rockford, farmers in Lee De Kalb, and La Salle Counties would be denied service if WREX-TV should become a UHF station.

Many of these farmers through their county farm bureaus have expressed their concern directly on the possibility of losing dependable television service and have passed resolutions in their county farm bureau meetings on this subject. Copies of those resolutions are attached as exhibits. Added to these formal resolutions, other counties have supplied letters expressing their desire to retain these two stations as VHF stations.

In addition to those counties which will lose all dependable service, other farmers have expressed concern because they feel this action would result in poorer quality television programing.

Having had considerable experience in the television programing field for the past 10 years, I have been well acquainted with the difference in quality standards between Illinois VHF and UHF stations since it is obvious, I am sure, that the station which provides the larger market can also spend a larger budget on program production. Much of the service to agriculture performed by these stations lies within this service area.

Although some Illinois UHF stations do provide some farm programing, none of these stations can provide the depth of coverage, particularly on agriculture subjects affecting all the people, as is currently provided through VHF channels.

If these two stations were to be changed from UHF to VHF transmission, it would require several UHF transmitters to provide a basic signal to those who would lose service. The possibility of such UHF stations coming into existence if the two stations in question were to be reduced to UHF transmission is rather slim. A UHF station, in order to be successful, must be supported by population centers of some substance and unfortunately the areas which would be left without a signal do not have such population centers.

UHF stations are not to be condemned because they program principally for urban audiences. Because of the nature of the UHF signals, and because these do not reach deeply into rural areas, these stations do not program heavily for

farm people since the farm portion of their audiences are quite small.

Quite the reverse is true in the case of the VHF stations which, by nature of their longer range signals, provide television in many farm homes and consequently program for this segment of their audiences.

In addition to action taken by county farm bureaus, the Illinois Agricultural Association board of directors has taken action to oppose the deintermixture of WCIA, channel 3, Champaign, and WREX–TV, channel 13, Rockford. Excerpts from the meetings of the board of directors of this association are attached as exhibits VIII and IX.

I live in the viewing area of WCIA, channel 3, Champaign. Of my personal knowledge, I know that it provides added television service even though I do receive other television signals. The mere presence of WCIA in this large central Illinois area has also contributed to the program standards of UHF stations operating in the same area and I believe the viewers have benefited materially.

Farm families depend upon television for two very important services—markets-weather-news and entertainment.

Markets and weather provide two important ingredients used daily by the farmer in planning his business operation. Although modern transportation has meant the farmer can attend entertainment events in large towns, he still depends heavily upon television for his evening entertainment.

If the legislation now pending before this committee should receive such action that the deintermixture of WREX–TV, channel 13, Rockford, and WCIA, channel 3, Champaign, has not been precluded. I would urge that the Congress should not permit disturbance of the present balance of UHF and VHF stations in Illinois which are currently servicing rural areas well.

EXHIBIT I

CHRISTIAN COUNTY FARM BUREAU—EXCERPT FROM MINUTES OF 1961 POLICY DEVELOPMENT MEETING, SEPTEMBER 28, 1961

Mr. Irwin then read the following resolution received from Moultrie County Farm Bureau: "The members of Christian County Farm Bureau go on record as favoring the continuation of WCIA television station, on present VHF frequency. A change to UHF would hurt a lot of rural people. We respectfully ask for consideration."

Mr. J. Wayne Hoover moved to retain VHF television station WCIA, channel 3, in its present location at Champaign. It was seconded by Kenneth Satterlee. The motion carried.

HARVEY B. IRWIN,
Legislative Chairman.

EXHIBIT II

DOUGLAS COUNTY FARM BUREAU—EXCERPT FROM 1961 POLICY DEVELOPMENT

1. WCIA (CHANNEL 3), CHAMPAIGN, ILL.

There has been talk that channel 3 will be taken off of VHF and put on UHF.

Douglas County would like to see WCIA remain on channel 3. The station has good broadcasting power and is rendering a good service to farm people.

HENRY G. SCHULTZ, *President.*

EXHIBIT III

EFFINGHAM COUNTY FARM BUREAU—EXCERPT FROM POLICY DEVELOPMENT REPORT

Two local issues were discussed at the beginning of each meeting. Those in attendance were 100 percent in favor of keeping TV station WCIA in Champaign on VHF, because if this channel were changed to UHF Effingham County would be left in a blind area with very poor TV reception of any channel. Champaign is our main TV station. A petition was circulated and signed.

We realize there are other alternatives for the city in bringing in TV reception, but these alternatives will do little or nothing in helping rural people. For this reason we feel that all farm bureaus within the channel 3 hearing area should support keeping Champaign a V station so as to benefit farm people within the area. We urge their support on this issue.

K. W. KLARMAN, *President.*

EXHIBIT IV

IROQUOIS COUNTY FARM BUREAU—EXCERPT FROM POLICY DEVELOPMENT REPORT

WCIA–TV: It was the unanimous decision at all policy development meetings that farm bureau should use their influence to keep WCIA television station at full power.

ROBERT L. MCCRAY.

EXHIBIT V

MOULTRIE COUNTY FARM BUREAU—EXCERPT FROM POLICY DEVELOPMENT REPORT

Also, that all be done that possibly can to keep WCIA, the television station at Champaign, on its present frequency. A county resolution is to be sent to the FCC and a letter to neighboring counties will be sent asking them to aid in retaining WCIA on its present frequency.

BRUCE SMITH, *President.*

EXHIBIT VI

JO DAVIESS COUNTY FARM BUREAU—EXCERPT FROM REPORT OF P.D. MEETINGS HELD IN JO DAVIESS COUNTY

IX. VHF FOR CHANNEL 13

We request the IAA to oppose the policy of the Federal Communications System whereby they elect to remove channel 13 from VHF and put it on UHF.

JOHN BACKENKELLER,
Vice President; Chairman, Legislative Committee.

EXHIBIT VII

WINNEBAGO COUNTY FARM BUREAU—EXCERPT FROM SUMMARY OF FARM BUREAU POLICY DEVELOPMENT PROGRAM FOR WINNEBAGO COUNTY

(*a*) It was suggested that county farm bureaus in the area of WREX television do everything possible to help them retain VHF channel 13 and oppose the plan to require them to operate on UHF channel 17.

CLARE CLOVER,
Legislative Committee Chairman.

EXHIBIT VIII

ILLINOIS AGRICULRURAL ASSOCIATION—EXCERPT FROM MINUTES OF BOARD OF DIRECTORS MEETING HELD THURSDAY AND FRIDAY, NOVEMBER 9–10, 1961

Messrs. Mathias and Goebel of the legal department were invited into the meeting. They discussed with the board the fact that the Federal Communications Commission is proposing the deletion of VHF television, channel 3, from Champaign, Ill., and further proposing to assign it to ultrahigh frequency, which would result in smaller coverage by the station and would leave many rural people without the use of channel 3, Champaign, Ill.

Upon motion by Mr. Brown, seconded by Mr. Widholm and carried, the following resolution was adopted:

Resolved, That the Illinois Agricultural Association oppose the deletion by the Federal Communications Commission of VHF television, channel 3, from Champaign, Ill.; and be it further

Resolved, That a statement of such opposition be prepared and filed in behalf of this association *In the Matter of Deintermixture of Champaign, Illinois*, docket No. 14244, now pending before the Federal Communications Commission.

It was reported to the board that the same situation might prevail in the Rockford area relative to station WREX.

It was moved by Mr. Lamoreux, seconded by Mr. Steinert, and carried:

That the officers be authorized to investigate the VHF situation in connection with station WREX, Rockford, Ill., and if sufficient information is compiled to show that a lack of coverage would result in changing the station from VHF to UHF, that the association be authorized to file a statement on behalf of the association similar to the one filed in connection with channel 3, Champaign, Ill.

———— ————, *Secretary.*

EXHIBIT IX

ILLINOIS AGRICULTURAL ASSOCIATION—EXCERPT FROM MINUTES OF BOARD OF DIRECTORS MEETING HELD MONDAY THROUGH FRIDAY, JANUARY 22–26, 1962

Channel 3 and channel 13 deintermixture.—Mr. Allen reported to the committee that the action authorized by the board of directors in its November meeting has been taken and that statements have been filed with the Federal Communications Commission supporting the position of channel 3 (WCIA, Champaign) and channel 13 (WREX, Rockford).

———— ————, *Secretary.*

SOME COMMENTS ON THE TECHNICAL REALITIES CONCERNING TELEVISION ALLOCATIONS

(By George R. Town, Dean, College of Engineering, Iowa State University; and William L. Hughes, Head, School of Electrical Engineering, Oklahoma State University)

ABSTRACT

A realistic engineering comparison of the service which can be provided at VHF and UHF is essential in the formulation of a television allocations plan. The critical technical factors are wave propagation, receiver noise figure, receiving antennas, interference, and transmitter power. A consideration of these factors leads to the conclusion that the service provided by the 70 UHF channels is far less than 70/12 times the service provided by the 12 VHF channels. It is suggested that VHF service may be increased by the use of directional transmitting antennas, and UHF service by the development of satisfactory on-channel boosters.

INTRODUCTION

The problem of allocations is the most important of the many problems facing the television industry.[1] Our present nationwide television system, which serves a very high percentage of the area and an even higher percentage of the population of the continental United States, is built largely around the 12 VHF channels. Of the 544 commercial television broadcasting stations now in operation, 466 are VHF stations and only 78 are UHF stations. It is generally conceded that if any significant number of new stations are to be added, either more VHF channels must be provided or more effective use must be made of the UHF channels. Since the first alternative appears to be at best a remote possibility, those seeking to find ways of increasing the number of television stations quite naturally look toward the greater utilization of the UHF region for television broadcasting purposes. Many proposals have been made to this end. Some call for either the immediate or the eventual shift of all television broadcasting from the VHF to the UHF region; some for continued use of both regions with complete deintermixture, complete intermixture or various degrees and kinds of intermixture. Regardless of the logic or lack of logic of these proposals, the fact remains that for both technical and commercial reasons UHF television has not been generally successful; and efforts to move any or all television broadcasting to the UHF region have been received with little enthusiasm.

In 1956, the Federal Communications Commission (FCC) invited the television industry to join in a concerted, cooperative attack on the problem which has been paraphased as that of "making UHF television as good as VHF television." This the industry declined to do, a principal reason being that Federal antitrust laws made such cooperative development and research illegal. The industry did, however, form the Television Allocations Study Organization (TASO) which made a comprehensive study of the engineering factors underlying the allocation of frequencies for television broadcasting. The results of this extensive study are contained in the TASO Report dated March 16, 1959, and the Supplementary TASO Report dated June 13, 1960. The tests of UHF television in New York City which are currently being implemented by the FCC will provide further information regarding the degree of success which can be achieved with UHF in metropolitan areas.

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[1] Statement of FCC Commissioner Frederick W. Ford (at that time Commission Chairman) as reported in the New York Times, Mar. 27, 1960.

In the TASO reports and elsewhere there exists a large body of technical information regarding UHF and VHF television. It is the purpose of this paper to present a summary of this information as it affects television allocations. There is no intent either to advocate or to oppose the use of UHF for television broadcasting, but rather to present facts. In an attempt to write a paper of reasonable length, many details are omitted. It is hoped that the references cited will furnish the reader with adequate supplementary information. The authors will be happy to discuss details with anyone who is interested.

THE 70 CHANNEL QUESTION

A principal attraction of the UHF region of the spectrum as far as television broadcasting is concerned, is the fact that 70 channels in this region (470–890 Mc) are available in comparison with 12 channels in the VHF region. One can easily fall into the trap of concluding that therefore approximately six times as much television service can be provided at UHF as at VHF. To a considerable extent, however, the vision of 70 channels may partake of the nature of a mirage. The problem is to examine the situation quantitatively and determine how much is mirage and how much is real. One or two examples will show what is meant and will introduce the discussions which form the remainder of the paper.

One of the great differences between UHF and VHF is the factor of propagation, which is directly reflected in station coverage. The TASO data showed that with existing stations, the range of a UHF station is significantly less than the range of a comparable VHF station. If the VHF range is R times the UHF range, the area covered by the VHF station is R^2 times as great as that covered by the UHF station. Therefore, if the same total area is to be served by UHF and by VHF, and if the spacing between cochannel stations were the same at UHF and at VHF, the effective ratio of UHF to VHF channels would not be 70:12 but rather would be $70:12R^2$. Actually, the necessary cochannel spacing is somewhat less at UHF than at VHF, as the undesired interfering field, like the desired service field, is not propagated as well at UHF as at VHF. More information may be needed here but it probably is reasonable to accept the figures set forth in the FCC rules for minimum cochannel spacing, although further experience with UHF may (hopefully) prove that the required spacings at UHF may be reduced. The ratios of the FCC specified minimum cochannel spacings at UHF to those at VHF vary between 0.91 and 0.93 in Zones I, II, and III. Taking an average ratio of 0.92, the effective ratio of the number of UHF channels to the number of VHF channels becomes

$$\frac{70}{12 \times 0.92^2 R^2}$$

or

$$\frac{70}{12 \times 0.85 R^2}.$$

Again, the "taboos" set by the FCC further limit the number of UHF channels that can be assigned in any given locality. Some of these taboos are doubtless too strict. Neverthless, such factors as receiver local oscillator radiation and receiver image response are basic in nature and do decrease the effective number of UHF channels available for assignment, say by a factor of T. This again reduces the effective ratio of UHF to VHF channels to

$$\frac{70}{12 \times 0.85 R^2 T}$$

or approximately

$$\frac{7}{R^2 T}.$$

The values of R and T do not have to be very great to reduce this ratio to the neighborhood of unity. If the ratio were unity, this would mean that the 70 UHF channels would serve the same total area as the 12 VHF channels at, incidentally, a cost for transmitters of approximately R^2 times as great.

These considerations appear to be too obvious to merit emphasis, but their importance must not be overlooked. If the service provided by 70 UHF channels should prove to be no greater than that provided by 12 VHF channels, there would be no point at all (with respect to total coverage) in substituting an all-UHF television system for an all-VHF system.

PROPAGATION

Within line-of-sight distances from a transmitting antenna, smooth-earth theory predicts that field strength at a receiving antenna will vary directly with carrier frequency. In areas where the terrain closely approached smooth-earth conditions (Lake Pontchartrain Bridge in New Orleans and San Joaquin Valley south of Fresno, Calif.), the TASO data showed that these predictions were fulfilled. Unfortunately, most terrain is not smooth and, at the limiting ranges, most receiving antennas are not within line of sight from transmitting antennas. Under these practical conditions, UHF signals are lower, rather than higher, than VHF signals for the same transmitter power and antenna locations.

The extensive body of field strength measurements made by TASO was analyzed by A. H. LaGrone.[2] His conclusions were that at low VHF (Channels 2–6), the average field strength is one db below theoretically-predicted median field strength curves; at high VHF (Channels 7–13), four db below; and at UHF, 22 db below. Other analyses of the TASO data give direct comparisons between UHF and VHF field strengths (per kilowatt of effective radiated power) at identical measurement positions. These comparisons showed that when averaged over all positions measured by TASO, the low VHF band field strength exceeded low (lower half of band) UHF field strength by 7.5 db. Also, high VHF band field strength was 4.5 db above the low UHF band field strength. Curves published by the FCC show similar differences between VHF and UHF. For example, consider Figure 1 which was obtained by plotting the FCC propagation curves on the same sheet of paper.[3] This figure gives data taken from the F(50,50) curves for 600 and 1,000 foot transmitting tower heights and one kilowatt effective radiated power. The solid curves are for 1,000 foot tower heights and the dotted curves are for 600 foot tower heights. The differences in signal strength at various distances from the transmitter are quite striking.

It is true that there is some argument among engineers as to the validity of these curves, but these arguments are over minor numbers of decibels. When final curves are arrived at, if they ever are, they will differ only in detail from the present FCC curves.[4] Work is continuing on propagation studies by both private and public organizations. Nevertheless, the writers of this paper are willing to stand by the statement that as far as television allocations are concerned, the propagation information is essentially in.

These comparisons of median field strengths do not tell the complete story. Again, the TASO data showed the much greater variability of UHF fields from the median values. When continuous runs were made over distances of 100 feet or more, the average variation of low VHF fields was 3.8 db; of high VHF fields, 6.2 db; and of (lower half) UHF fields, 9.4 db. This is in accord with the common experience that deep nulls are more frequent and more pronounced at UHF than at VHF.

Data taken by H. T. Head and given in the TASO reports show another serious problem at UHF, namely the deleterious effects of trees in the neighborhood of receiving antennas. These effects can be very serious in areas which are only moderately wooded.

Still another, and probably the most important factor is that at anl beyond the fringe areas, UHF field strength falls off much more rapidly and more completely than does VHF field strength.

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[2] TASO Report, pp. 413–447.

[3] The data for the VHF curves were taken from FCC Document 60–766 (90114), Docket No. 13340, entitled "Further Notice of Proposed Rule Making," and dated July 1, 1960. The propagation curves attached to that document (from which the data of Figure 1 were taken) are dated June 20, 1960, and are entitled "Television Channels 2–6, Estimated Field Strength Exceeded at 50 Percent of the Potential Receiver Locations for at Least 50 Percent of the Time at a Receiving Antenna Height of 30 Feet." The data for the UHF curves were taken from the propagation curves on p. 411 of the TASO report. These curves, in turn, were plotted from data obtained from the so-called "Appendix A" curves of the FCC T.R.R. Report No. 2.4.16, dated October 22, 1956, for a frequency of 700 Mc.

[4] For example, the authors do not believe that the same curves should be used for low VHF and high VHF. In particular, they believe that high VHF signals attenuate slightly faster than low VHF signals and can cite data to support this belief. The important point, however, is that the differences probably are trivial; for allocations purposes, the FCC curves are, in the authors' opinions, sound.

There are three things that hight help to overcome this propagation handicap as far as UHF is concerned. They are (1) an improvement in receiver noise figure, (2) the ability to make more efficient receiving antennas for UHF, and (3) the ability to run massive amounts of power in UHF transmitters. These things and various combinations of them have been cited as the solutions to the UHF propagation problem. Therefore, it is vital to realize that while all of them help, none of them or any combination of all three of them can be a cureall. We shall examine the situations, with respect to receiver noise and receiving antennas, in detail in the following sections of this paper. The situation with respect to transmitter power depends upon the current state of the art rather than being truly basic in nature. The current status of television transmitting plants is presented in detail in Section 7, pages 58–111, of the TASO Report and need not be repeated here. Probably the only really significant change since the publication of the TASO Report has been the development of UHF transmitting tubes having greater operating life than those used formerly. This, of course, results in somewhat lower UHF transmitter operating costs than those reported by TASO. But it does not change the UHF power limitations indicated in the TASO Report.

RECEIVER NOISE FIGURE AND VARIOUS AMPIFYING DEVICES

There has been a lot of talk about parametric amplifiers and tunnel diodes curing UHF problems. Some of these amplifying devices currently look as though they may be too expensive for commercial UHF receivers but let's ignore this economic situation for the moment and suppose that they could be put in a receiver for nothing. The best of current UHF tuners have a noise figure from 10.5 to 12 db over the UHF band.[5] Parametric amplifiers and tunnel diode amplifiers have been built in the laboratory with noise figures of around three decibels, although this depends somewhat on the configuration of the circuit in which the device is used.[6] Therefore, the best improvement we could hope to get even using the best available amplifier is somewhere between 7 and 9 decibels. This is closely approaching the theoretically ultimate noise figure, and we will never do better than an improvement of 10 to 12 decibels.

It has become customary to rate a television picture as one of six grades. These six grades are excellent, good, passable, not quite passable, poor, and not usable.[7] Panel 3 of TASO did extensive work in an effort to establish the signal strength required for a given grade of picture. If field strength at 30 feet is taken as standard, it was found by TASO that for a passable picture at low VHF frequencies, a field strength of roughly 42 dbu was required. At high VHF frequencies, 52 dbu was required. At low UHF (Channels 14 to 40), roughly 57 dbu was required, and at high UHF (Channels 41 to 83), about 64 dbu was required. If we ever develop the ability to put essentially zero db noise figure amplifiers in television sets, the best we could hope for is that all four of these figures would become the same; and this could be achieved only if UHF receiving antenna efficiency were vastly improved. (See next section.) There is room for argument in terms of a db here and there, but this means that the best we can ever do for a passable picture in a television set for the receiving antenna at 30 feet is to have a signal strength somewhere between 35 to 40 dbu. A more practical lower limit is probably about 40 dbu, and even this is based on the assumption that very low noise devices will be available. At this point, it is interesting to quote the report of the Airborne Instruments Laboratory where an extensive study has been made of the economics of this situation. Their conclusion is that from an economic point of view, the best that probably can be expected for several years to come is to have an optimum tuner with a noise figure of about 8 db.[8] If this is true, then at UHF around 45 dbu signal strength at 30 feet is required to get a passable picture (even if the receiving antenna problem is completely solved).

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[5] "Evaluation of Receiving Techniques Suitable for UHF–TV Reception," Airborne Instruments Laboratory Report No. 8432–1 to the Federal Communications Commission, August 1960: p. 31.

[6] Op. cit., pp. 13, 19.

[7] This practice was established by the first National Television System Committee and was found useful by the second National Television System Committee and the Television Allocations Study Organization.

[8] Op. cit., p. 35.

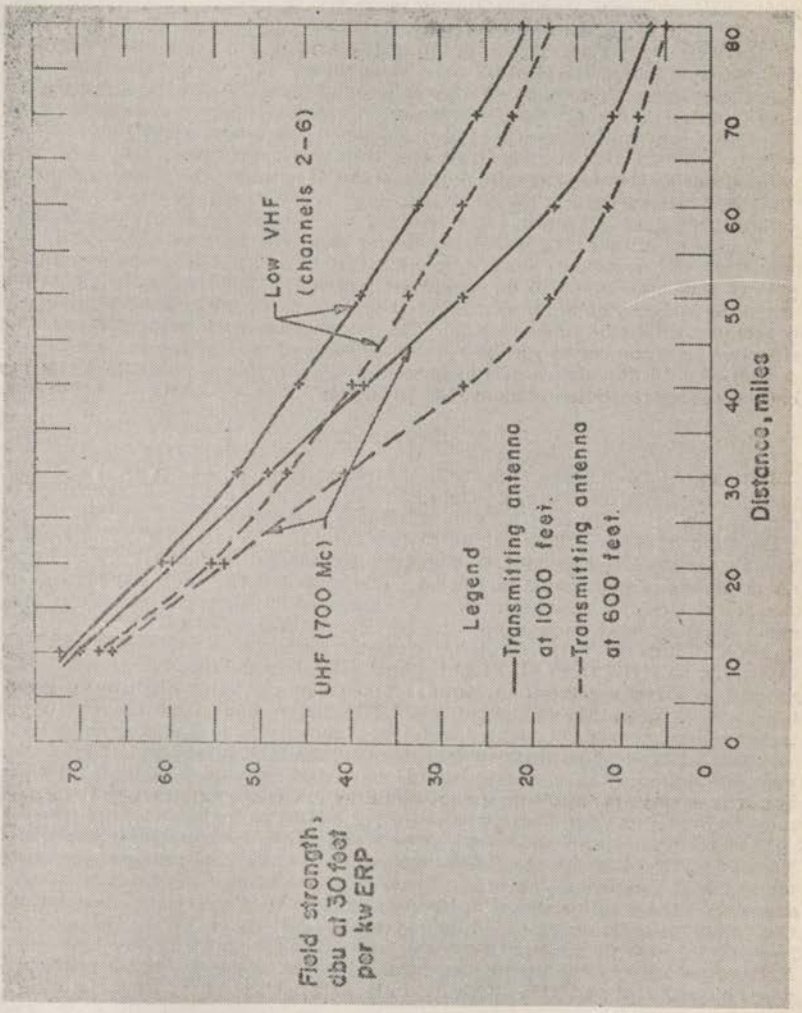

FIGURE 1.—VHF and UHF propagation curves for typical conditions.

RECEIVING ANTENNAS

One of the interesting and difficult things about antennas for UHF receivers is the following. For any given type of antenna, the effective voltage delivered to the receiver transmission line terminals falls off inversely as the frequency. This means that a half wave dipole subjected to a field of 1,000 micro-volts per meter at 100 megacycles gives five times as much voltage output as a half wave dipole subjected to a 1,000 micro-volt per meter signal at 500 megacycles. The first thought one might have is that since the half wave dipole at 500 megacycles is one-fifth as large, why not simply make it five times as big and perhaps this capture area factor can be overcome. If we could be sure that the UHF wave front was always perfectly coherent and if we could make and efficiently match the larger antenna, the capture area problem might well be overcome.

A study has been made of the coherence of UHF wave fronts by Brown, Epstein, and Peterson.[9] The conclusions were that in open smooth country, the theoretical antenna gains were approached. In shadowed locations, the gain was greatly reduced and in some instances was less than unity. Unfortunately, as pointed out by Brown, Epstein, and Peterson, it is in these regions of weak signal that the antenna gain is needed the worst. A great deal of work remains to be done in this area but again there are limits. It would be highly unlikely for any given size of antenna (appreciably larger than the half wave length at all frequencies concerned) to do better at UHF than at VHF. Practically, it is always true that one will do somewhat worse at UHF than at VHF with large antennas because of antenna efficiency problems. Nevertheless, a few db of improvement might be picked up here, in comparison with present designs. Considering both improved receiver noise figure and reasonably improved antenna design, the 40 dbu figure of the preceding section for a passable UHF picture becomes more realistically around 45 to 50 dbu.

INTERFERENCE

External noise has an important influence on television reception, especially noise of an impulsive nature. Quantitative data are rather scarce, but all available information shows that the effects of impulsive noise are much less at UHF than at VHF. This is due to two factors. The first of these appears to be a rather slow, but nevertheless steady, decrease in the magnitude of impulsive noise fields as frequency is increased. The second is the fact that because of the characteristics of receiving antennas, transmission lines, and receivers, a higher signal field strength is required at UHF than at VHF for pictures of comparable quality. Thus the ratio of signal strength to impulse noise strength is more favorable at UHF than at VHF if the UHF picture is usable at all. This immunity of UHF receivers to impulse noise (or any other externally generated noise) will decrease somewhat as UHF tuner noise figures are improved. Nevertheless, greater immunity to impulse noise is a plus factor for UHF.

A second type of external noise also favors UHF operation. This is cosmic noise or galactic noise. Here again, consistent quantitative data are lacking but it is certain that cosmic noise should be entirely negligible at UHF while it may well be very significant at the lowest VHF channels.

Echoes or ghosts or multipath effects appear to be less bothersome at UHF than at VHF, although the TASO data indicate that they are not serious problems at any frequencies except in large cities. In cases where multipath effects are severe, the smaller size of a highly directive UHF receiving antenna permits the easier alleviation of the difficulty at UHF than at VHF. Airplane flutter is a special case of multipath interference. It is frequently very bothersome at VHF, especially in the vicinity of large airports, but it is for all practical purposes nonexistent at UHF. This again is a significant plus factor for UHF.

CONFIRMATION BY FIELD STUDY

The foregoing factors are summarized in the TASO report from which the following table was taken. Critical distance was defined as that distance at about which, on the average, with currently used effective radiated powers and transmitting antenna heights, service fell off rapidly.

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[9] "Comparative Propagation Measurements; Television Transmitters at 67.25, 288, 510, and 910 Megacycles." RCA Review, vol. 9, No. 2, pp. 177–201, June 1948.

Frequency range	Channel range	Critical distance in miles
Low VHF	2- 2	65
High VHF	7-13	55
Low UHF	14-40	40
Medium and high UHF	41-83	30

One may, if he wishes, quibble about a mile or two here and a db or two there, but the fact remains that the area served by a UHF transmitter is very substantially less than that served by a lower power VHF transmitter.

THINGS THAT CAN BE DONE AT VHF

Another aspect of the television allocation problem is that of what might be done to increase the service rendered on the present 12 VHF channels. One obvious approach is to consider what might be done to decrease the spacing between cochannel stations and between adjacent channel stations. This would permit additional "drop-in" assignments. The new stations would serve the areas in their immediate vicinities but would increase the amount of interference in the areas served by nearby stations. These nearby stations would, of course, also cause interference in the areas served by the new "drop-in" stations. There are, however, certain techniques which could be employed to reduce the amount of interference caused by and to stations at reduced mileage separations. These techniques should be used judiciously and only after a consideration of the circumstances existing in individual cases. Certainly few, if any, engineers wish to see television broadcasting deteriorate (as some feel that AM radio broadcasting has deteriorated) through the use of ever more closely packed station assignments. Judicious use of directional transmitting antennas and perhaps also of very precise carrier frequency offset could permit reductions in cochannel spacing in at least some instances. Likewise, certain changes in adjacent channel allocation practices could result in a reduction in adjacent channel station spacing.

The Supplementary Report of TASO presents the results of the tests of directional transmitting antennas at WBZ-TV and WKY-TV. While these tests admittedly did not cover all types of antennas, all channels and all types of terrain, they did show quite conclusively that under the conditions under which these tests were made, directional antennas with a 15 db null worked well. These antennas performed in the field in accord with predictions made by theory and with predictions made from tests at experimental antenna test sites. TASO quite conservatively, and quite wisely, recommended that *if* directional antennas were to be used, certain specified auxiliary test antennas should be installed and certain specified tests should be made of the installed directional antennas to insure their proper operation. These conditions are not burdensome and their use would permit the performance of each directional antenna to be determined both when originally installed and thereafter as necessary.

The one major unresolved problem is that of the amount of null fill-in, or reflections into the null from reflecting surfaces in the direction of high field strength, which would be experienced in rugged terrain or in the case of injudiciously located antennas in the neighborhood of large cities. It seems reasonable to expect that this difficulty can be minimized through judicious choice of antenna sites relative to the area served, the area protected and the terrain. This emphasizes the necessity of considering the use of directional transmitting antennas on a case-by-case basis. Moreover, the performance of a directional antenna in every instance can be determined through the use of the methods recommended by TASO.

There appears to be no good reason why the FCC should not proceed to authorize the operation of a few carefully chosen television broadcasting stations at reduced or "substandard" cochannel spacing with these stations using directional transmitting antennas with nulls not exceeding 15 db to protect the service of neighboring cochannel stations.[10] The results obtained from the op-

[10] Essentially this has been done by the FCC Report and Order of August 3, 1961, which was released after this paper was written.

eration of a few such stations would be strongly indicative of what can be achieved through the use of directional transmitting antennas and the FCC would then be in a position to proceed intelligently in a study of the extent to which the television allocations problem could be relieved through the use of this technique.

The second technique having an implication on cochannel spacing is that of very precise carrier frequency offset. By this is means operation of television broadcasting stations geographically nearby, with carrier frequencies offset by carefully selected amounts of the order of a few hundred cycles with a frequency tolerance of plus or minus one cycle. The need for this technique arises when four neighboring television stations are located at minimum standard spacings. With normal nominal carrier offsets of −10, 0, and +10 kc. it is obvious that two of the four stations must operate on the same nominal frequency. Laboratory tests made by TASO indicated that if very precise carrier frequency offset is used for stations operating nominally on the same frequency, the interfering effects would be no more worse than those existing between adjacent precise carrier offset (±10 kc. with a frequency tolerance of ±5 cycles) stations. The use of very precise carrier frequency control would not lead directly to reduced cochannel spacings, but it would give assurance that interference between "second-ring" cochannel stations would be no worse than interference between adjacent stations. The achievement of very precise carrier frequency control at VHF appears to be technically possible, though somewhat expensive.

The general problem of adjacent channel interference has been studied by the Iowa State University Engineering Experiment Station under the sponsorship of the Association of Maximum Service Telecasters. The purpose of the study was to determine just what ratio of undesired sound carrier to desired picture carrier could be tolerated for lower adjacent channel interference and what ratio of undesired picture carrier to desired sound carrier could be tolerated in upper adjacent channel interference. Again, a six-point scale was used as established by the first NTSC in terms of rating picture quality. The details of this work are in a report submitted by AMST to the FCC in Docket 13340. The results are essentially as follows.

For a passable picture on the average, the lower adjacent sound carrier should be no higher than 12 decibels above the desired picture carrier (in terms of measured field strength at 30 feet). For upper adjacent channel interference, if the picture criterion is taken as a passable picture, the upper adjacent undesired visual carrier should be no greater than 26 decibels above the desired sound carrier (same field strength measuring conditions). In both cases, it is the beat between the sound and picture carriers appearing in the desired picture that is objectionable. It is interesting to note that this same problem has been studied by Jansky and Bailey, Radio Engineering Consultants, of Washington, D.C. The figures that they use are 10 db for lower adjacent channel interference and 24 db for upper adjacent channel interference. Thus from a practical point of view the two results are in essential agreement. The Jansky and Bailey report[11] was also submitted to the FCC under Docket 13340. It was found in both studies that when adjacent channel station spacings are reduced to 40 miles as proposed by the Federal Communications Commission, there are considerable increases in undesired interference. This means that in order to add a station at this spacing there will be considerable degrading of other television services.

An interesting possibility arises at this point. Suppose adjacent channel stations instead of being spaced 40 miles were spaced zero miles. That is, suppose their antennas were put on the same tower. Further suppose that the radiated powers were equal for the visual carriers but that the lower adjacent sound carrier was dropped about seven decibels. It has been shown in at least two cases that to drop the sound carrier seven decibels has essentially no effect on the coverage of the station, especially when its coverage is interference limited.[12] It will then be found that essentially nowhere in the coverage pattern of both stations will the undesired to desired signal ratios exceed those allowable for a passable picture. The difficulty of adjacent channel interference comes when one of the stations is very much stronger than the other station. Nowhere in the coverage area of both stations will this occur.[13]

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[11] Memorandum on Adjacent Channel Television Interference.
[12] TASO Report, pp. 230–236.
[13] It might be necessary to put attenuation pads in receivers located close to the transmitters to avoid intermodulation in the receiver tuner.

The possibility of decreasing sound power to reduce lower adjacent channel interference in conventionally spaced adjacent channel stations should not be overlook. If adjacent channel spacings are reduced appreciably from the present standards, certainly the increased lower adjacent channel interference in interference limited situations could be partially or wholely overcome by reducing sound power. In the opinion of the authors, a reasonable reduction in sound power, say of the order of seven decibels below present standards, could be made without adversely affecting the effective coverage of a television station.[14]

THINGS THAT NEED TO BE STUDIED IF TELEVISION IS TO BE MOVED TO UHF

In the event that all television were switched to UHF, the success or failure of such a move would be determined primarily by four major factors. These factors are:

1. The practical limits of transmitter powers that can be achieved.
2. The ultimate limits in receiver noise figures that can be economically achieved.
3. The degree to which the receiver antenna capture area problem can be overcome. This means that study of the coherence of wave fronts and the physical design of large antennas for UHF must be undertaken.

The success with which a network of *on-channel* boosters can be made to operate surrounding a given UHF high power transmitter. On-channel boosters rather than translators are desirable because if translators are used, the 70 channel allocation will become a mirage.

Even if all-UHF television is 10 years away, these things should begin to come under intensive study. It is probably true that the first and second items (those of transmitter power and receiver noise figure) can be fairly well established now. Items three and four present as yet unanswered questions. The success or failure of all-UHF television could easily hinge on these two items.

EDUCATIONAL TELEVISION

So far, no mention has been made of one question which is really of basic importance. This is the question as to whether or not the public really needs additional television service. This is a question of basic policy. If the public really needs, say, double the amount of television service which it now receives, there should be no thought of abandoning either the UHF or the VHF region. Both should be used as both would be needed.

There may well be many who would say that, particularly in view of programing trends, there is no urgent need for more television service and therefore no need for more usable channels. In this case, it might be concluded that certainly the television broadcasting industry could relinquish some UHF channels or some VHF channels or some of each. One should not, however, overlook the possibility of a greatly expanded use of television broadcasting for educational purposes. Some leaders in the industry have predicted that in the not far distant future, the needs of educational television for space in the frequency spectrum will equal, or even exceed, those of commercial television. It would appear, therefore, that since the expansion of both commercial and educational television is a distinct possibility, the FCC should continue to reserve both the present 12 VHF and the present 70 UHF channels for television broadcasting.

CONCLUSIONS

This paper has presented some facts that the authors hope are not to generally drawn and yet are shorn of supporting details for clarity and brevity. Taken together, they present no easy allocations solution; but the authors are firmly convinced that while subsequent tests will provide much useful information, the allocations problem will never become easy. It will probably never even become equitable. The fact remains, these are the practical technical limitations in which an allocations plan must be developed. It is freely acknowledged that technical facts alone do not provide a full basis for allocations but neither can they be ignored.

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[14] A favorable attitude of the FCC toward such a proposal is indicated in FCC Report No. 3848 entitled "Comprehensive Actions To Foster Expansion of UHF TV Broadcasting," dated July 28, 1961.

The CHAIRMAN. Mr. O'Brien?

Mr. O'BRIEN. Mr. Watts and I were bouncing around some figures about the possible loss of revenue to the Government if this legislation is passed and if we decide to lift the excise tax. I think we finally came to $150 or $180 million, and now I have been corrected as to the taxes on the manufacturer's price, so it would be $100 million instead of the higher figure we mentioned. I just wanted the correct the record on this.

The CHAIRMAN. It is a very important item. Of course, the gentlemen well know we do not have jurisdiction over that subject matter.

Mr. O'BRIEN. I understand, sir, but it is in the record, and I thought $50 million was worth correcting.

The CHAIRMAN. I think it is worth mentioning.

Now, Mr. Moss brought up a matter a moment ago that I think I should give at least some recognition to, and probably should have heretofore. The Chair has no way of knowing from the list that you have here who is for and who is against legislation proposed here and under consideration. I want to be as fair as I can and give all viewpoints an opportunity.

Except for the gentleman from Massachusetts, the leadoff witness this morning, we have had no opposition to the bills. We have had different views, of course. And we have had no opposition to deintermixture here. Do we have anyone who is to appear as a witness who is opposed to the proposed legislation and the concept of deintermixture?

Mr. COE. Yes, sir; ABC. We are opposed to anti-deintermixture.

Mr. SANDWICH. Electronics Industry Association, Mr. Chairman.

The CHAIRMAN. We are going to get to ABC, the American Broadcasting Co., next. And who is the other one?

Mr. ENGLISH. John W. English, Erie, Pa., station WSDE.

Mr. SANDWICH. Also the Electronics Industry Association, Mr. L. M. Sandwich, Mr. Chairman.

Mr. O'CONNOR. I am Ralph O'Connor, of Madison, Wis. We are against the intermixture, but for the Roberts bill. So your division here is a little difficult.

The CHAIRMAN. Well, I wanted to get this information so that I can be guided accordingly.

At this time, we will have Mr. Robert L. Coe, vice president for television station relations of the American Broadcasting Co. Mr. Coe, I observe you have a statement, and also apparently your comments are rather voluminous here on the rulemaking procedures of the Commission.

Mr. COE. Yes, sir.

The CHAIRMAN. Could I get some idea about how you intend to proceed?

Mr. COE. With your permission, sir, it has been my intention to try to save some time by skipping parts of my statement, only with the request that the whole statement be included in the record.

The CHAIRMAN. Your entire statement will be included in the record. You may proceed.

And the other matter, I assume, will be received for the files.

Mr. COE. That is my desire, sir.

The CHAIRMAN. Very well, you may proceed.

STATEMENT OF ROBERT L. COE, VICE PRESIDENT, AMERICAN BROADCASTING CO.; ACCOMPANIED BY MORTIMER WEINBACH, VICE PRESIDENT AND ASSISTANT GENERAL COUNSEL; AND LEONARD GOLDBERG, RESEARCH DEPARTMENT

Mr. COE. Mr. Chairman and members of the committee, my name is Robert L. Coe. I am vice president of American Broadcasting Co. in charge of television station relations. With me are Mortimer Weinbach, vice president of ABC and assistant general counsel of our parent company, and Leonard Goldberg, of our research department.

As we understand these hearings, interested parties are to present their views on Congressman Harris' all-channel bill (H.R. 8031); on the bills introduced by Congressmen Roberts (H.R. 9267), Moss (H.R. 9277), Anderson (H.R. 9201), Hemphill (H.R. 9293), and Riley (H.R. 9322), which, in addition to providing for all-channel legislation, would prohibit the deletion of any previously assigned VHF stations; and on H.R. 9349 introduced by Congressman Mack and House Resolutions 450, 457, and 469 introduced, respectively, by Congressmen Thomson, Andrews, and Grant, which seek to prevent, temporarily or indefinitely, the substitution of UHF channels for VHF channels in communities in which such VHF channels are now assigned.

ABC supports H.R. 8031, which we believe would help bring an expansion in television service. However, for reasons which I will endeavor to explain, we respectfully oppose the other bills and resolutions, for we believe that the process known as selective deintermixture, against which these legislative proposals are aimed, is essential to expansion of television service in the public interest.

If all-channel receivers are available throughout the Nation, a substantial incentive will be provided for revived interest in UHF broadcasting. A critical obstacle to the effective implementation of UHF channels has been the lack of a mass audience able to receive UHF transmissions.

The projected growth of the United States in such areas as population, educational activity, and economic development, as well as the increasing complexities of vital public affairs, underline the importance of a television system that can expand and keep pace with national needs. For example, the Bureau of the Census projects our 1970 population at 210 to 215 million and a college enrollment at that time of about 7 million. The Secretary of Commerce, speaking before the National Association of Manufacturers in Detroit, Mich., on October 4, 1961, suggested that our gross national product could approximate $800 billion by 1970—compared with $504 billion for 1960. The increasing complexity of our political and social affairs is demonstrated on a daily basis. If our television system is to have the capacity to expand and meet the needs flowing from national growth, as well as present needs, both VHF and UHF channels must be utilized.

Ever since the 1954 Senate hearings on S. 3095, presided over by Senator Charles E. Potter, ABC has recognized that the ultimate solution to the utilization of both UHF and VHF channels necessarily requires an all-channel receiver. To this end, we have supported all

those proposals which have been made to eliminate artificial categories of channels, including the proposal to abolish the excise tax on all-channel receivers as an inducement to the increased manufacture and sale of such sets.

Turning to the next of H.R. 8031, we note that the language of the bill is not specifically limited to, or directed to, the all-channel set problem; it is much broader. The bill, in substance, would authorize the Federal Communications Commission, whenever "the objectives" of the Communications Act require, "to prescribe minimum performance capabilities for apparatus designed to receive television pictures broadcast simultaneously with sound." All such equipment traded in, or shipped in interstate commerce for sale or resale, would be required to meet the standards set by the Commission as "minimum performance capabilities." We raise the question whether this is not an unduly broad statement of the needed legislative authority.

Clearly, the authority contained in H.R. 8031 would permit the requirement that any television receiving set shipped or traded in interstate commerce have an all-channel reception capability. But, for example, it would also permit a requirement that such a set be capable of receiving color pictures, stereophonic sound, or 3–D. Moreover, it would enable the Commission to establish quality standards for components, such as minimum tolerances for individual parts of the set.

Apart from the question whether this broader authority would be desirable and beneficial to the public, ABC is apprehensive that the proposed legislation might encounter much greater difficulty than it would if it were directed specifically to the matters giving rise to its introduction, and for which there is a clear-cut justification in terms of our nationwide television system.

Rather than the broad authority proposed in the bill, we would suggest that the language of the bill be revised to authorize the Commission to establish such technical requirements as may be necessary (1) to provide reasonable assurance that apparatus designed to receive television pictures broadcast simultaneously with sound is capable of receiving all channels presently allocated by the Commission for the television broadcasting service, and (2) to provide that no person shall trade or ship such equipment in interstate commerce for sale or resale to the public unless it complies with such requirements.

In supporting all-channel legislation, we desire to emphasize that such legislation is not a substitute for deintermixture in the eight markets where it is now being considered by the Federal Communications Commission. The experience of UHF stations in intermixed markets, even those where virtually 100-percent conversion has been achieved, shows that VHF and UHF have not been able to exist satisfactorily side by side. The only presently available remedy for UHF is deintermixture in those markets which have a preponderance of UHF stations. In these markets, UHF can now, and in the near future, prosper, expand, and provide an adequate television service only if it is relieved of the excessive burden of local VHF competition.

ABC desires to emphasize that it does not, however, favor an all-UHF system, either now or eventually, or a system of widespread or area deintermixture. Our position is limited to support of se-

lective deintermixture in these eight markets, and is founded on the proven experience of the past 10 years, from which the following conclusions may be drawn:

1. The experiment with intermixture of UHF and VHF channels has proved a failure with the result that the use of UHF channels has been very limited and the Nation does not today have a satisfactory television system. Only 65 of the television markets in the United States are served by 3 or more competitive local television outlets.

2. The root cause for these serious shortcomings in the present system derives from the inability of UHF stations to thrive competitively side by side with VHF stations.

3. The policy of selective deintermixture to all UHF, which was urged upon the FCC in 1954 and 1955 and adopted by the FCC as an interim policy in 1956, although it enjoyed widespread industry support and was approved by committees of both Houses of Congress, has as yet been applied in only a handful of cases.

4. Despite prolonged and elaborate studies over many years, the Commission has not as yet found any remedy for television allocations which gives promise of providing effective solutions within the foreseeable future except selective deintermixture to all VHF by the addition of short-spaced VHF assignments in certain markets and to all UHF by the removal of VHF assignments in other markets.

5. Because of the limitations which the Commission has rightly imposed upon the use of short-spaced VHF assignments, all-VHF deintermixture can be expected to produce effective and multiple television service in approximately only 10 more markets.

6. If any further improvement in television allocations is to be achieved within the foreseeable future, it must be through selective deintermixture to all UHF of the eight markets specified by the FCC.

We have, we believe, been able to establish these conclusions in the extensive comments which we filed before the FCC on February 19, 1962, in the eight deintermixture proceedings. Copies of these comments have been made available to your committee, and we ask that they be included in the record of this proceeding.

We would like to note that we are not alone in our conviction that the eight markets chosen by the FCC should be deintermixed. Comments favoring selective deintermixture were recently submitted to the FCC by two of the three networks, two leading television receiver manufacturers, educational broadcasters, two major multiple VHF station owners, and the affected UHF stations.

In our comments before the FCC on these proposals, we have analyzed the arguments pro and con determixture. Deintermixture has been a subject of controversy before the Commission and Congress for so long that all the arguments which could conceivably be made on either side of the question, have been advanced not once, but many times, and the Commission has treated them in a number of reports and orders, decisions and other papers.

The basic argument for UHF deintermixture can be stated briefly. UHF deintermixture is literally the only way that markets, with one VHF assignment and with no possibility of additional VHF assignments, can be provided with three or more competitive program serv-

ices. In this way there would be no limitation on the number of stations in the market other than the market's capacity to support additional stations. That deintermixture can accomplish this primary objective has been demonstrated in those areas which were made UHF only in the Commission's 1952 allocations plan, and in those few additional areas which the Commission has since deintermixed to all UHF.

An incidental advantage to UHF deintermixture is that in some cases the VHF channels removed from UHF areas can be assigned to other areas where additional service is needed and where UHF channels have no present utility. For example, deintermixture of Springfield, Ill., permitted the use of channel 2 in the VHF areas of St. Louis, Mo., and Terre Haute, Ind., and deintermixture of Peoria permitted use of channel 8 in the VHF area of Davenport-Rock Island-Moline. Similarly, if Erie, Pa., and Binghamton, N.Y., are deintermixed as proposed by the Commission, new commercial VHF stations can be added to Akron, Ohio, and Utica, N.Y.—markets where UHF cannot work because of existing VHF service—and a new educational VHF channel can be added to State College, Pa., for use by Penn State. Thus, by this action not only would the Erie and Binghamton markets be made competitive and have at least three services each, but also the two VHF channels now in use there could be reassigned to provide VHF stations in three other underserved VHF markets, thereby creating a total of at least nine competitive stations in place of the two monopoly stations now in existence.

The arguments against deintermixture are numerous and varied. The spokesmen for VHF applicants and licensees are ingenious. They have not shrunk from advancing wholly inconsistent arguments.

The argument most frequently heard is that UHF deintermixture violates the statutory mandate of section 307(b) of the Communications Act, and is therefore illegal. This argument has been repeatedly advanced to the Commission and to the courts and has been uniformly rejected. In *Owensboro on the Air, Inc.* v. *United States*, 104 U.S. App. D.C. 391 (1958), the court of appeals stated that the Commission's jurisdiction to deintermix to all-UHF by rulemaking is "no longer open to question."

In view of the court's ruling the section 307(b) argument merits little discussion. The basic fallacy is that it asks the Commission to apply section 307(b) to the allocation of VHF channels in a vacuum, without regard to the fact that an effective and truly competitive nationwide service requires the use of the 70 UHF channels as well as the 12 VHF channels and without regard to the fact that the allocation of VHF channels affects the use which can be made of the UHF channels. If the Commission and the courts were to accept the interpretation of section 307(b) advanced by the opponents of UHF deintermixture, the underlying purposes of that section would be frustrated rather than furthered. While it may seem inequitable that some markets must use UHF while others enjoy VHF service, it is even less equitable for some markets to be doomed indefinitely to one or two VHF services while other markets enjoy three, four, or more, which is the inevitable result of continuing the present intermixed system.

Thus a policy of selective deintermixture, instead of contravening section 307(b) of the act, will in fact give effect to the congressional

mandates imposed in sections 303(g) and 307(b). An intermixed system which transforms UHF assignments into "paper allocations" does not encourage the "larger and more effective use of radio." An intermixed system is not efficient nor does it result in a fair and equitable distribution of radio service when the net effect of the VHF allocation is to shutdown one or more existing UHF operations and prevent the establishment of other UHF operations.

In connection with the section 307(b) antideintermixture argument, it has been asserted that deintermixture is improper because it is based upon a recognition of the competitive inequalities of UHF and VHF stations and it has been suggested that its implementation verges on the immoral since it results in benefiting UHF operators by placing them in a better competitive position. The proponents of this argument profess great attachment to competition and decry UHF deintermixture as "tampering" with a natural competitive situation. They conveniently ignore the fact that deintermixture leads to more, rather than to less, competition. In deploring that the Commission should even consider taking action which incidentally is to the private interests of UHF broadcasters, they seemingly believe that the Commission is sufficiently naive not to recognize that continuance of intermixture confers far greater benefits upon the private interests of the VHF broadcasters who cling so tenaciously to their virtual monopoly positions.

Obviously, UHF deintermixture will benefit some existing and prospective broadcasters, just as continuation of intermixture will benefit others. The Commission, of course, should disregard the purely private interests on both sides of the argument and should continue, as it has in the past, to focus its attention on the public interest.

Some opponents of UHF deintermixture assert that the troubles of UHF have been exaggerated. They would have the Commission believe that if it will only postpone action long enough, all will come right in the end. All experiences with intermixture to date has been to the contrary.

We have now waited 8 years since the UHF–VHF problem became evident. While the decline in UHF has slowed in recent years, because we have been gradually approaching the point where all the UHF stations are located in UHF-only or partially deintermixed areas, the trend is still downward. Also, production of all-channel receivers has declined from over 20 percent in 1953 to about 6 percent today. While all-channel legislation will eventually relieve this situation, it will be of no immediate effect. Various estimates have been made that it will take 5, 10 or even more years following passage of the legislation, with necessary intervening industry-Government studies, rulemaking proceedings, tooling time and possible court litigation, before a significant number of all-channel sets are in use. In the meantime, we could have less rather than more service, for UHF operators cannot be expected forever to endure losses.

Those who favor continuation of the status quo point to the fact that in the eight markets selected by the FCC, UHF, and VHF stations have continued to coexist. But this does not establish that such intermixed situations are in the public interest. Examination of these situations will show that in many cases the UHF stations are still

operating at a deficit and cannot continue indefinitely and that in none is there a healthy competitive situation.

The effect of this situation is familiar. The UHF stations, depressed by the presence of the VHF station in the market, are inhibited from investing additional capital in improvement of the facilities; set conversion in fringe areas cannot be promoted and is not undertaken by the public; and the market is limited permanently to noncompetitive television service and a number of stations not necessarily reflective of the market's size and economic potential.

Some opponents of UHF deintermixture attempt to suggest that UHF provides an essentially second rate service and that therefore no areas of the country should be required to rely on it exclusively. This argument is simply without foundation. In 1956 when UHF stations had been in commercial operation only a short time and when UHF equipment, particularly receiving equipment, was inferior to that which is now available, Broadcasting Telecasting magazine conducted a special study of the South Bend-Elkhart and Scranton-Wilkes-Barre areas which had been made UHF only in the 1952 allocations plan. The results of this survey were reported in articles appearing in the May 7 and May 14, 1956, issues of the magazine. The lead articles of the series, which may be found at page 35 of the May 7 issue, appeared under the headline, "Where VHF Isn't It Isn't Missed," and was preceded by the following summary of the survey and its findings:

> Will UHF television really work? Is it technically capable of serving a large market, the outlying communities and the farm homes over an 80- to 100-mile diameter?
>
> Can it start from scratch, with no local VHF competition, and overcome established fringe service from VHF stations?
>
> B–T sent Senior Editor J. Frank Beatty into the field to find out. He toured two of the more active UHF-only markets: South Bend and Elkhart in Michiana (northern Indiana-southern Michigan), and, in northeastern Pennsylvania, the neighboring cities of Wilkes-Barre and Scranton. These markets were picked for their contrast. South Bend-Elkhart country is flat, the stations are normal power. Wilkes-Barre-Scranton country is mountainous and two stations there are using power at maximum 1 million watts. Power, terrain, and antenna height are said by the experts to be primary considerations to a UHF signal.
>
> Editor Beatty talked to the station people, he monitored their signals for miles around, he talked to the set owners and to the servicemen who keep the sets running—and he talked to advertisers and agencies who buy UHF. His findings to all three of the questions above: Yes.

It is often asserted that UHF may be all right in areas of smooth terrain, but fails to provide adequate service in rough terrain. Again, experience in UHF-only areas is to the contrary.

Scranton-Wilkes-Barre, mentioned in the broadcasting article referred to above, is an area of rough terrain, yet not only the broadcasting survey but also more recent listener surveys have shown that the UHF stations there provide service not only in the immediate areas of the cities, but out to a radius in excess of 40 miles. There are other examples of successful UHF operation in areas of quite rough terrain. In fact, many of the surviving UHF stations are located in zone I, in which there is little or none of the flat terrain presumably necessary for successful UHF operation.

Opponents of UHF deintermixture argue that the public should not be required to make the additional outlay for UHF receiving equipment. Often the additional cost to the public resulting from deinter-

mixture would not be great, since in the areas proposed for deintermixture there is already substantial UHF conversion. In any case, however, the public benefits to be obtained from deintermixture clearly outweigh the additional cost for UHF receiving equipment.

Since television signals cannot be made to stop at any desired boundary, it is virtually impossible to create a simon-pure UHF-only area short of removing all VHF stations from the air. As a result, the service areas of UHF stations operating in markets that have no VHF stations are usually penetrated to a greater or less extent by VHF signals from stations in other markets. From these facts, the opponents of UHF deintermixture argue that it cannot be truly effective and therefore should not be undertaken. Penetration by VHF signals from outside stations is, however, irrelevant if by deintermixture of the central community of a UHF area a competitive climate can be created in which the UHF stations can prosper and grow. Experience shows that this is the case. The Youngstown, Ohio, market is a prime example.

Youngstown, which now has three network-affiliated UHF stations and one independent UHF station, receives grade B or better service from the three Cleveland VHF stations and the three Pittsburgh VHF stations. Despite this heavy invasion of signals from six VHF stations in other cities, the Youngstown stations have not only survived, but have prospered over the past 5 years.

The final argument against UHF deintermixture is that it will leave large rural and small town populations without acceptable television service. The argument is basically unsound for a number of reasons.

The major portion of the service provided by a deleted VHF station will continue to be provided by UHF facilities of reasonable power and antenna height. The areas within the service area of a VHF station lying beyond the effective service of a replacement UHF facility fall within the service area of stations in other markets.

There are other factors which the huge loss of service argument ignores. These are that the service of UHF stations in deintermixed areas can be enlarged by increases in power and antenna height. Experience has shown that where UHF stations are given a reasonable chance for survival, they can and will make the necessary additional investment. Also, outer areas presenting special problems, such as towns situated in deep valleys, can be provided with service through either UHF satellites or translators. This also has been and is being done in UHF-only areas.

Can anyone doubt that if Youngstown had been assigned one or two VHF channels in the 1952 allocations plan it would have today more than one or two local television services? The success of UHF in other areas which were made all-UHF in 1952, such as South Bend-Elkhart and Scranton-Wilkes-Barre, has also been described.

Let us now examine the experience in areas which, having been assigned VHF facilities in the 1952 allocations plan, were later intentionally deintermixed to all-UHF by rulemaking. One such market was Peoria, Ill. In 1956, when the Commission proposed UHF deintermixture of Peoria, operating there were WEEK–TV on channel 43 with power of 175 kilowatts, 442 feet above average terrain, and WTVH on channel 19 with power of 12.5 kilowatts, 290 feet above average terrain. In February 1957, the Commission finalized its proposal to deintermix Peoria. Today, as a result, both the existing UHF

stations have substantially increased their facilities. WEEK–TV to 371 kilowatts, 604 feet above average terrain, and WTVH to 186 kilowatts, 660 feet above average terrain. A third station, WMBD–TV, has gone on the air, orignially with 288 kilowatts, at 620 feet above average terrain, later increased in 1958 to 678 kilowatts, at 670 feet above average terrain. In addition, WEEK–TV has established a satellite UHF station, WEEQ–TV, at La Salle, Ill., which now operates with 14.4 kilowatts, at 443 feet; and WTVH has established a UHF translator in La Salle.

Thus deintermixture of Peoria has permitted substantial increases in the power and antenna height of the existing UHF stations, the establishment of a third UHF station with substantial power and antenna height, as well as the establishment of satellite and translator stations in a nearby community.

Another area which the Commission deinterdemixed in the 1956–57 rulemaking proceedings is Springfield-Decatur, Ill. Here the Commission removed channel 2, which was allocated but not yet assigned in Springfield, leaving that city with only UHF allocations. Nearby Decatur, which had not been assigned a VHF channel in the 1952 allocations plan was left UHF only. Deintermixture of the area was, however, only partial. The Commission's action did not affect channel 3 at Champaign, Ill., and later petitions to delete that channel were denied. Because of the continued existence of channel 3 in Champaign, the Commission's deintermixture effort in this area has not been as successful as it was in the Peoria area. Nonetheless it has resulted in substantial improvement of service to the public.

In 1950, WICS, the UHF station in Springfield, was operating with modest facilities. Its antenna height above average terrain was 430 feet and its effective radiated power was only 17.4 kilowatts. In 1958, relying upon the deintermixture of Springfield, it substantially improved its facilities and now operates with an antenna height of 940 feet above average terrain and effective radiated power of 468 kilowatts. Also, in 1959 it established UHF station WCHU as a semisatellite operating in Champaign. In 1960 when it appeared that UHF station WDAN–TV, Danville, Ill., would be forced off the air, it purchased this station and now operates it as a semisatellite of WICS under the call letters WICD.

WTVP, the UHF station in Decatur, is closer to WCIA on channel 3 in Champaign and has remained under greater competitive disadvantage than WICS. WTVP has not yet found it financially feasible to increase its basic facilities and continues with effective radiated power of 174 kilowatts at 540 feet above average terrain. In order to extend its service, however, it has recently established a UHF translator in Champaign which operates on channel 70 with effective radiated power of 1,180 watts and antenna height of 300 feet above ground.

Aside from the abovementioned improvements in UHF facilities in the area, coverage surveys indicate that UHF penetration in central Illinois has increased considerably over the past 5 years.

Thus, despite the depressant effect of the continued operation of channel 3 in Champaign, deintermixture of Springfield-Decatur has permitted significant improvement in television service in the central Illinois area.

Deintermixture of Fresno and Bakersfield, Calif., is too recent to have had much effect, particularly since channel 10 is still on the air at Bakersfield. One result of these actions which the Commission hoped for would be the establishment of additional UHF stations. The Commission's expectation was fulfilled before the end of 1961 to the extent that in December UHF station KDAS went on the air in Hanford, UHF station KICU–TV went on the air in Visalia, and a fourth UHF station, KAIL, went on the air in Fresno.

In the February 19, 1962, comments filed by ABC before the FCC we have made a detailed analysis of the anticipated effects of deintermixture in the eight markets selected by the FCC.

Our studies and surveys show that the eight markets all have high UHF conversion and are ideally suited for the furtherance of UHF.

Deintermixture of these markets would in no case cause a significant loss of service as a result of the elimination of the VHF channel. Our studies show that, in the eight markets selected for deintermixture, less than 10,000 homes possibly would lose one service; the service lost would not be their only service. In contrast, for the first time over 1 million new homes would receive a full 3-network service from their home stations. Within approximately a 40-mile radius of the VHF transmitter, existing service would be substantially maintained through the substitute UHF facilities. Beyond the 40-mile radius, in virtually every instance, the public is presently relying upon existing service, either UHF or VHF, other than the VHF service which would be deleted. To the limited extent that service would bs lost it could be restored through increased facilities of existing UHF stations and the establishment of additional UHF facilities, either independent, satellite, or translator. That this would happen has been demonstrated by experience with UHF deintermixture in Peoria, Springfield, and Fresno.

The proposed deintermixture would permit effective competition among a greater number of stations, and among the three national networks, in eight important markets. As a byproduct it would permit additional badly needed VHF assignments in other areas. The following table summarizes the situation before and after deintermixture.

You will note that this table on the left lists 14 communities. The first column shows the number of competitive stations before deintermixture, the total being 13. After deintermixture in these 14 communities you would have a total of 35 competitive stations.

Market	Number of competitive stations		Market	Number of competitive stations	
	Before deintermixture	After deintermixture		Before deintermixture	After deintermixture
Champaign-Decatur	1	3	Akron	0	1
Rockford	1	3	Utica	1	2
Madison	1	3	Providence	2	3
Erie	1	3	Augusta	2	3
Binghamton	1	3	Lafayette	0	[1] 1
Hartford-New Britain	1	3	State College	0	[1] 1
Montgomery	1	3			
Columbia	1	3	Total	13	35

[1] Educational.

Since the submission of our comments, we have had occasion to examine the comments simultaneously filed by National Educational Television and Radio Center (NET). Their comments also support deintermixture but suggest an alternative use for the VHF channels proposed for deletion. The NET comments state:

> Educational television spokesmen have consistently endorsed selective deintermixture of channel allocations so as to create areas in which UHF stations would be wholly or partly protected from VHF competition. Experience indicates that UHF stations have been able to render fully acceptable program service in those areas where the threats of VHF competition have been minimized or removed, and, conversely, the death or deterioration of UHF service has most often been attributable to the presence of VHF television facilities in the immediate area. Thus, NET believes that the Commission has rightly concluded that UHF services would be enhanced by removal of the local VHF channel assignments in the communities where deintermixture has been proposed. NET would, however, suggest that it may be feasible in a number of the areas where the Commission is considering deintermixture to retain the VHF channel but reserve the channel for a noncommercial educational use. It is true that the Commission has recently rejected such a resolution of the matter in the Fresno and Bakersfield deintermixture proceedings. (See *Bakersfield Deintermixture* case (21 R.R. 1549).) Nevertheless, since the Commission is here embarking upon a series of deintermixtures, involving a variety of local differing circumstances, NET is of the opinion that the Commission may desire to modify or alter its prior decisions in this matter, especially if a significant public interest is shown in the localities affected in behalf of a VHF reservation in an otherwise all-UHF area. NET has made initial investigations in several of the proposed deintermixed communities and understands that substantial local support could be mounted for a VHF reservation, except for the shadows cast upon such procedures by the Commission's rulings in *Fresno* and *Bakersfield*. As set forth in more detail hereinafter, it is contemplated that the reply comments to be filed in these rulemaking proceedings will be addressed to this deintermixture matter in specific detail. In this connection, NET herewith respectfully requests the Commission to direct its attention to this matter at the present time, and that, should it be favorably disposed to consideration of such VHF reservations, the Commission should forthwith issue either a further notice of proposed rulemaking or a statement to this effect and simultaneously therewith grant an extension of time for reply comments herein and in the specific deintermixture dockets (dockets Nos. 14239–14246) to a date 30 days from release of such statement.

ABC suggests that favorable consideration might be given to the NET proposal provided the deleted commercial VHF channels cannot be moved to other underserved VHF markets. If the NET proposal, with the modification we suggest, were adopted, educational VHF channels would be made available in six cities—Madison, Rockford, Columbia, Montgomery, Lafayette, Ind. (Purdue), State College, Pa. (Penn State)—and new commercial VHF assignments would be possible in Providence, Akron, and Utica. In addition, the 8 deintermixed markets would have a total of at least 24 competitive UHF assignments, a combined total of 33 viable stations in place of the 8 existing monopoly stations. Four of the eight areas would continue to receive VHF service—educational instead of commercial. All the commercial stations in these areas would be in the same band, with the result that ownership and management know-how and resources, rather than accidents of allocation, would become the determining factor in station accomplishments.

Those who oppose selective deintermixture in the eight markets contend that it is a beginning point only and that the FCC plans to extend it to other markets. We respectfully submit that this is a red herring, for it is apparent (with one possible exception) that

there are no other markets in the United States which should be deintermixed to UHF only. The six other markets mentioned last year in the trade press as being considered by the FCC for UHF deintermixture—Columbus, Ga., Baton Rouge, La., Saginaw, Mich., Lake Charles, La., Knoxville, Tenn., and Fort Smith, Ark.—are all areas where the UHF stations have either ceased operation (Columbus, Baton Rouge, Fort Smith, and Lake Charles) or where additional VHF channels (Saginaw and Knoxville) are needed to solve the competitive imbalance. In none of these six areas would deintermixture to UHF only be a desirable solution. The Commission recognized this and excluded these markets from the list of eight it selected.

The charge that the eight selected markets would only be the beginning is, therefore, without adequate foundation, as six of the seven Commissioners made clear 2 weeks ago in their testimony before the Senate Subcommittee on Communications on S. 2109, the companion bill to H.R. 8031.

Even if ABC did not favor selective deintermixture, we would still be opposed to the proposed legislation, for we believe that the details of television allocations should be left to the Commission to decide on a case-by-case basis. We respectfully believe that to limit the Commission's discretion in this area would inevitably do more harm than good, however laudable the immediate purpose of the legislation. Congress is far too busy to have the time to handle the enormous task of legislating a detailed allocations plan which would meet, and continue to meet, the needs of a rapidly developing service such as television.

Since 1927 and 1934 the Commission has been given the authority by Congress to allocate the available radio spectrum for broadcast, common carrier, and safety and special service use. In delegating this authority to the Commission, the Congress laid down two broad policy directives. Under section 303(g) of the Communications Act of 1934, the Commission was directed to—

> study new uses for radio, provide for experimental uses of frequencies, and generally encourage the larger and more effective use of radio in the public interest.

And under section 307(b) of the act the Commission was directed—

> when and insofar as there is demand for the same to make such distribution of licenses, frequencies, hours of operation, and of power among the several States and communities as to provide a fair, efficient, and equitable distribution of radio service to each of the same.

Since the Commission was given the power to make radio allocations pursuant to the broad policy directives described, we have seen a fantastic increase in the use of radio for broadcast and nonbroadcast purposes. The usable radio spectrum has been greatly enlarged and there are now literally hundreds of uses for radio that were not even dreamed of in 1927.

If in 1927 and 1934 the Congress had put the Commission in an allocations straitjacket and had said you may use certain frequencies in such and such a way and other frequencies in other ways, the great development in the use of radio could not have taken place; or rather the Congress would have had to sit down year by year and undertake to accomplish by legislation all that the Commission has done over the years through its rulemaking and adjudicatory functions. We submit

that Congress would have been unable to perform this task. As Prof. Kenneth C. Davis, a recognized authority on administrative law, in describing the growth of and need for administrative agencies has said:

> The legislative process and the judicial process, which are the principal alternatives to the administrative process, frequently fall far short of providing what is needed. A legislative body is at its best in determining the direction of major policy. It is ill-suited for handling masses of detail, or for applying to shifting and continuing problems the ideas supplied by scientists or other professional advisers. Experience early proved the inability of Congress to prescribe detailed schedules of rates for railroads, or to keep abreast of changing needs concerning the levels of import duties. Gradually our legislative bodies developed the system of legislating only the main outlines of programs requiring constant attention, and leaving to administrative agencies the tasks of working out subsidiary policies. This system facilitated not merely the promulgation of law through rules and regulations but the correlation of rulemaking with such other necessary activities as adjudication, investigating, prosecuting, and supervising.

Let us examine some of the difficulties in which the Congress will involve itself once it departs from its proper function of determining the direction of major policy and undertakes to supervise the details of television allocations. The Congress is now being asked to forbid the Commission to reach a particular allocation determination; namely, that certain areas which are presently served by both UHF and VHF stations should be deintermixed to UHF-only. The question of deintermixture is, however, only one of a number of allocations questions concerning which the Commission has recently taken action, or is in the process of acting, or considering possibilities for action. If the opponents of deintermixture are successful in getting the Congress to act on that question, other persons who oppose various Commission actions or proposals may also be expected to seek congressional interference and with equal right.

For example, in another step toward improvement of the existing television allocations structure, the Commission has recently determined to waive the minimum mileage separation requirements between adjacent channel and cochannel VHF stations, in order to permit a few critically needed VHF assignments. This action has also been strenuously opposed by certain elements in the industry. Interestingly enough, the prime opponent of so-called short-spaced assignments, the Association of Maximum Service Telecasters (AMST) is also one of the prime opponents of deintermixture. If it is successful in precluding deintermixture by congressional action, why should it not likewise seek the same assistance against short-spaced assignments, and upon what basis could the Congress act in one area and decline to take action in the other?

Another question which has been before the Commission for many years and which continues to require Commission attention is the extent to which television frequencies, either UHF or VHF, should be put beyond the reach of commercial applicants and reserved for the exclusive use of noncommercial educational television. Here again is an area where opponents of Commission actions may seek to involve the Congress should the Congress evidence a willingness to concern itself with the details of television allocations.

We do not, however, have to go beyond the confines of the proposed legisation to show threatened involvement of Congress in complex allocations problems. The legislation would preclude the Commission from deleting a VHF from any community for the purpose of having

all the television stations in that community operate on UHF channels. One of the proposals which the Commission now has under consideration is the removal of channel 5 from Enid, Okla., and its reassignment to Oklahoma City. The Commission's purpose in this proceeding is to provide a badly needed third competitive service in Oklahoma City rather than, as such, the deintermixture of Enid. The result of the proposed action if it is made final, however, will be to leave nothing but UHF channels available for use in Enid so if another station is reestablished there in the future it will have to be on a UHF channel. Since the Commission's primary purpose in the Enid-Oklahoma City case is not deintermixture, the proposed action would still presumably be permissible if the proposed legislation were passed. But since the actual effect of the proposed action would be to limit Enid to UHF insofar as local service is concerned, the question of its permissibility under the proposed legislation is not entirely free from doubt.

Another allocations change which the Commission has under consideration (though the present posture of the case is somewhat different from that of Enid-Oklahoma City) is the removal of channel 7 from Evansville, Ind., and its reassignment to Louisville, Ky. Here the Commission has a two-fold purpose: first, as in the case of Enid-Oklahoma City to provide a badly needed third competitive service to the important market of Louisville and second, to deintermix Evansville to all UHF. Since the Commission's purpose is in part deintermixture, the contemplated action might well be forbidden under the proposed legislation. This result would certainly seem to be anomalous, for it appears that the Commission would be permitted to remove channel 5 from Enid where the action would serve only one purpose, and forbidden to remove channel 7 from Evansville where the action would serve the same purpose as in the Enid case, and also another purpose.

Thus, even from this rather superficial discussion we think it is apparent that the proponents of the subject legislation are seeking to involve the Congress in the complex details of television allocations and in areas which are appropriate for administrative action and inappropriate for legislation.

As I have said, since 1927 and 1934 the Commission has handled the complex questions involved in the appropriate utilization of the radio spectrum under the broad policy directives of sections 303(g) and 307(b) of the Communications Act. Generally speaking the Commission has done an excellent job over the years. Occasionally, however, like all of us, administrative agencies make mistakes. We think it is now agreed that the 1952 allocations plan, which attempted to establish a framework for a fully competitive nationwide television system and for a companion noncommercial educational television system, upon an assumption that UHF and VHF channels could be intermixed, was a mistake. The considerations underlying the large number of decisions reached in the plan were exceedingly complex. In addition to adopting a policy of intermixture and a detailed table of television allocations, the plan also dealt with, and reached conclusions upon, many other technical questions. Finding ways and means to correct the mistake of intermixture presents problems which are even more complex because we no longer have the

relatively clean slate we had in 1952. It seems apparent to ABC that the problem of correcting these errors must be left to the Commission and should not be undertaken by the cumbersome process of legislation.

The proposed legislation, by freezing VHF allocations as of September 1, 1961, would in effect "grandfather" not only certain VHF stations, which are clamorously urging such action, but would also "grandfather" many of the errors and inequities in the 1952 plan. It would, so far as television allocations are concerned, virtually repeal the mandate of section 303(g) and section 307(b) of the Communications Act.

The concept of intermixture was basic to the 1952 plan. The Commission devised the allocations plan that it did because it believed that the UHF band would be fully utilized and the UHF stations would eventually be able to compete with VHF stations. In paragraph 197 of its 1952 report, the Commission stated:

> Because television is in a stage of early development and the additional consideration that the limited number of VHF channels will prevent a nationwide competitive television service from developing wholly within the VHF band, we are convinced that the UHF band will be fully utilized and that UHF stations will eventually complete on a favorable basis with stations in the VHF. The UHF is not faced, as was FM, with a fully matured competing service. In many cases UHF will carry the complete burden of providing television service, while in other areas it will be essential for providing competitive service. In view of these circumstances, we are convinced that stations in the UHF band will constitute an integral part of a single, nationwide television service.

We all know today that the UHF band, contrary to the Commission's conviction in 1952, has not been fully utilized and cannot be fully utilized within the foreseeable future, that UHF stations have not been able to compete on a favorable basis with VHF stations, and that UHF band does not constitute an integral part of a single nationwide television service.

We can also be certain that if the Commission had known in 1952 what it knows today, it would not have allocated the VHF channels as it then did. While I would not undertake to guess what the Commission would have done in 1952 if it had been forewarned of the failure of UHF in intermixed areas, it is easy to point to certain situations of gross inequity in the present allocations plan which we cannot conceive the Commission creating had it known that intermixture would not work.

In short, the Commission in 1952 could believe that its television allocations plan carried out the mandate of section 307(b) to achieve a fair, efficient, and equitable distribution of television service, only because it then thought that the UHF band would constitute an integral part of a single nationwide television service. If that belief was erroneous, as time has proved, then the allocations plan adopted in 1952 did not fulfill the mandate of section 307(b), and to freeze the VHF allocations substantially as made in the 1952 report is to repeal that mandate.

Similarly, since it is generally agreed that UHF is essential to an effective nationwide television service, the 1952 report could be found consistent with the mandate of section 303(g)—"to generally encourage the larger and more effective use of radio in the public interest"—only upon the assumption that intermixture would work.

Intermixture has not worked, and the mandate of section 303(g) has not been properly fulfilled. To freeze VHF allocations as made in 1952 is thus, in effect, to repeal section 303(g) as far as television is concerned.

During the hearings the suggestion was made that in the event Congress were to enact all-channel legislation, the Commission might give consideration to a moratorium on deintermixture. As we have made clear in our statement, we believe that deintermixture in these eight markets is essential. We believe that deintermixture of these markets is more important to their development as competitive television markets than all-channel legislation. We therefore would strongly oppose a moratorium if it were to apply to the eight cases now being processed. However, we would not oppose a moratorium on additional deintermixture cases.

ABC therefore supports the subject legislation insofar as it would give the FCC authority to require that all television receivers shipped in interstate commerce shall be equipped to receive UHF as well as VHF signals, but opposes it insofar as it would limit the Commission's jurisdiction to make changes in existing VHF television allocations. Our reason for this position is the same in both instances—to provide a wider range of service to the public.

There is one other point I would like to mention. Aside from the public, ABC has been the principal victim of the shortage of competitive facilities in these eight important markets. Since 1954 we have urged the FCC and committees of Congress to act to remove this competitive inequality. After many years, the FCC now proposes to correct the mistakes in the 1952 allocations plan. Unless the FCC is given a free hand to decide these cases in the public interest, the Government-created monopolies in these eight markets will be continued and true competition will not exist in television. This result would be contrary to our American tradition.

In closing, I would like to repeat an excerpt from the statement we first made before Senator Potter in 1954 and have repeated in other hearings since then.

> This committee, therefore, is faced with an extraordinary decision of policy, for determination reached now in the present period of television development will determine the availability and quality of competitive service in the future.
>
> There may be those who will oppose any remedial action by this committee or by the Federal Communications Commission on the ground that it might deprive those who were first in the field of the fruits of their resourcefulness and labors.
>
> The fruits currently enjoyed in limited-facilities communities are not as much the result of individual initiative or superior ability as they are of VHF channel scarcities * * *.
>
> It is one thing to be first in the field where competitors are free to follow. It is another thing to enjoy a clear field because competitors are enjoined from pursuit.

Thank you very much, Mr. Chairman, for your kindness.

The CHAIRMAN. Mr. Coe, thank you very much for your very good statement on this subject expressing the view of the American Broadcasting Co.

Mr. O'Brien, any questions?

Mr. O'BRIEN. I would just like to join the chairman in complimenting the witness on a very fine statement.

Mr. COE. Thank you, sir.

The CHAIRMAN. Mr. Younger?

Mr. YOUNGER. I have a couple of questions.

I, too, agree that the statement was very clear.

But, as a network operator, I can't quite see why your position would be just the reverse of Mr. Stanton's position before the committee yesterday, both of you operating networks.

Mr. COE. I think the reason is quite clear, sir. Mr. Stanton operates a network that by his own testimony on Wednesday, has something over 200 affiliates. And it just happens that in most of these markets we are talking about he already had the VHF facility.

We are faced with a situation where we have, I think, approximately 120 primary affiliates. We simply do not have access to all the market as does CBS.

In a competitive business such as ours, there are many instances where we simply lose business, because we cannot offer access to as great a number of U.S. television homes as CBS. And the handicap is more than that, sir, because let us not forget that in building our program structure we have to invest in any average program just as much money as does CBS. And yet we don't have the number of stations that CBS does to carry that program. And, therefore, our cost, amortized program cost per station, is considerably higher.

And when you also consider that ABC as the third network to enter the scene, in many cases to achieve program dominance, perhaps we have to spend more money on programs, the handicap we face is even greater.

But that is the reason why I am here.

This deintermixture of these eight markets we consider not only vital in the public interest and vital in the development and use of UHF, but as far as ABC is personally concerned, it is vital to our development.

Failing to do this is going to set us back years, because, I repeat, sir, we do not have the access to the markets that Dr. Stanton's network has, or NBC.

And this explains, perhaps, the vigor of our support of deintermixture.

Mr. YOUNGER. And then you want to leave the testimony of both Dr. Stanton and yourself on a basis of self-service and not in the public interest?

Mr. COE. No, if I gave you that impression, I certainly am sorry. I thought the whole tenor of my statement here today was emphasizing that this proposed deintermixture in these eight markets does propose additional public service. As a matter of fact, our studies show that approximately 4 million people for the first time will have a program selection, a program choice of 3 networks rather than the 1 or 2 programs that they now can select from.

And I submit, sir, that it is the right of every one of us in every part of the country to have the same program selection, the same choice to pick the program he wants, as does anyone else. This selective deintermixture in these eight markets is a step and a big step in correcting an inequality that has existed for so long.

Mr. YOUNGER. One other question.

Did I understand you to say that you are in favor of the eight deintermixtures which are now pending before the Commission, but are

perfectly willing to prohibit cases in the future—was that your statement?

Mr. COE. My statement was that we certainly support the deintermixture of these eight cases; yes. And we are perfectly agreeable to a moratorium that would preclude consideration of any others. But it seems to us in the first place——

Mr. YOUNGER. That statement was a little inconsistent, to my way of thinking. I didn't quite understand it.

Mr. COE. Maybe I inadvertently stated some inconsistency. We believe in and we support these eight deintermixture markets. As I indicated in my statement, we don't think there are any others as far as that goes where it will be practical to deintermix.

Mr. YOUNGER. In other words, you have enough stations in the other markets to satisfy you; is that it?

Mr. COE. No; I wouldn't say that. But we don't think deintermixture is applicable to any of the other markets.

Mr. YOUNGER. That is all, Mr. Chairman.

The CHAIRMAN. Mr. Sibal?

Mr. SIBAL. Mr. Coe, following up Mr. Younger's question, isn't any agreement on the moratorium beyond the eight proposed deintermixtures totally meaningless if you are right about the Commission's not having any intention of going further?

Mr. COE. Well, I would say, that depends on the viewpoint. Obviously some people do feel there are other markets that could be deintermixed, otherwise why all the hue and cry that this is only a beginning?

Mr. SIBAL. Yes; but your statement indicates that you think that is ridiculous.

Mr. COE. That is correct.

Mr. SIBAL. And, therefore, isn't a moratorium on these other things meaningless?

Mr. COE. In our viewpoint; yes. But, as I say, there are other people who feel that there are other markets that could be deintermixed, and they fear that.

Mr. SIBAL. You have indicated in your testimony the capability of UHF to provide service that is almost perhaps essentially as good as VHF; is that correct?

Mr. COE. Right.

Mr. SIBAL. Why wouldn't all-channel receiver legislation which would create a capability to receive all the market provide you with a competitive position with a UHF station?

Mr. COE. Well, in the first place, I think we must be realistic about all-channel receiver legislation, and when it would really be effective, and when homes would really be equipped with all-channel receivers. This is a long time, I submit.

Mr. SIBAL. On the other hand, would you say that when the day came when all-channel receivers were broadly present in the American home, that a UHF station could in fact compete with a VHF station?

Mr. COE. I would say not—you mean in the same market?

Mr. SIBAL. Yes, sir.

Mr. COE. I would say not under the conditions we face at the moment, advertiser interest in VHF and prejudice against UHF is very great. This is one of the reasons why it makes it so tough to operate.

Mr. SIBAL. Yes, but if you can really provide the service that you claim, why would they not buy your service?

Mr. COE. Well, there may well be a day in the future when that could arrive. To be honest with you, I have spent something over 40 years in this business, and I have seen many changes, and I wouldn't attempt to lay down any rules or positive conclusions as to what is going to happen in the distant future, because things have changed too rapidly in the past; anything is past.

Mr. SIBAL. Let me say this, Mr. Coe: I am very sympathetic of the concern of monopoly and lack of competition, and I can understand your position on this, and I think any reasonable person can.

But I can't quite follow the consistency in an argument which on the one hand indicates that the service can be provided which is comparable by UHF and then if the Congress makes an attempt to see to it that UHF will be received by the markets, that it follows that there is a monopoly and a lack of competition if one network is used in a UHF facility in an area and another is using a VHF.

Mr. COE. I must call your attention to my statement where, when I talked about the capabilities of UHF this was within the service area of which UHF is capable, roughly something like a 40-mile circle, whereas VHF has a tremendous coverage, much greater coverage normally than that.

Mr. SIBAL. Yes, but UHF can be made with translators and boosters of various kinds, can be made to reach that, can't it?

Mr. COE. Well, yes, it can. But I think that is, again, a long-term proposition.

Mr. SIBAL. Then doesn't it follow that if we deintermix these areas a substantial number of people will lose service?

Mr. COE. No, sir; because in the detailed analysis which we have filed with our comments you will find—and as I briefly touched on in my statement—in the areas outside of the area the UHF station would serve, those people in the main already have several other services available, and the figures will show that they have available the same network service from another station in most cases.

Mr. SIBAL. Well, would you then challenge the testimony we have heard earlier in these hearings that in Connecticut, for example, that if channel 3 VHF were to lose its license, so to speak, and a UHF be substituted, that a quarter of a million people would be out of service?

Mr. COE. I can only say that our studies indicate no such loss.

Mr. SIBAL. What do your studies indicate?

Mr. COE. Our studies show that there is no loss at all in that particular area.

Mr. SIBAL. If that is the case, why wouldn't a UHF station be competitive?

Mr. COE. I am afraid I don't follow you there.

Mr. SIBAL. Well, if a UHF facility can provide equal service with a VHF facility in Hartford, Conn., to use one example, where is the lack of competition?

Mr. COE. Well, I don't think that you can assume that they are providing equal service now.

Mr. SIBAL. Then how can you say that there would be no loss of service?

Mr. COE. I am afraid somewhere I am losing you, or you are losing me. Looking ahead—assuming for the moment the deintermixtures of Hartford, and accepting our statement that the UHF station would have a service area, a radius of approximately 40 miles, the people within that radius certainly wouldn't lose any service. In the outer area, our study indicates in the area outside the 40-mile circle that actually that area is already serviced by other CBS stations.

Now, this is not to say that at the present time any people in that area are not watching the present VHF; we are just making the point that there are other similar program services which would be available if the Hartford VHF was deleted. But the Hartford VHF obviously covers a larger area than the UHF stations. And, certainly, the UHF stations are not competitive at this point in time.

Mr. SIBAL. Eliminating the cost factor for the moment, which I fully recognize can't be eliminated under a system of private enterprise, but just considering from a point of view of the technical ability to reach the people now covered by the VHF station, can the UHF station be put in shape to reach the same people?

Mr. COE. The same people as the VHF station?

Mr. SIBAL. Yes.

Mr. COE. The UHF station alone?

Mr. SIBAL. Yes.

Mr. COE. Not on the basis of what we know today, no. That is why we have limited the service of the UHF to a 40-mile radius.

Mr. SIBAL. Even with translators and so forth?

Mr. COE. The translators are something else again. I am talking about the one UHF station.

Mr. SIBAL. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Dominick?

Mr. DOMINICK. Thank you, Mr. Chairman. Mr. Coe, if I understand your testimony correctly, it is your position that UHF is not competitive with VHF, and that in these eight markets only VHF should be eliminated and UHF should be put in. At the same time, you also say that all-channel receivers should be required to be sold on a nationwide basis, at added expense to the public, and thereby also making the existing sets obsolete.

If UHF is not competitive, and if it is really going to be used in these eight areas only, what possible excuse is there for the Federal Government to require the rest of the public in the entire United States to buy all-channel receivers?

Mr. COE. First, sir, I did not imply that by limiting deintermixtures to all markets that there would not be uses for UHF elsewhere; I think the educational field alone is a tremendous one for educational TV. And as I think has been stated earlier in this hearing, there is already an evident demand for many, many stations which could be satisfied by UHF. And I think, too, you again must consider the time factor. I believe you are from Colorado——

Mr. DOMINICK. That is correct.

Mr. COE (continuing). Where there are nothing but VHF stations. We have a couple of very fine ones there. And I can understand your interest. But I think we must recognize that if we go ahead with this deintermixture in the eight markets, this, in our opinion, will encourage UHF in general quite a bit. And I think, looking ahead to the

time when all-channel receivers actually would be in the hands of the public, and a substantial number of them had purchased them, isn't it quite possible that in your own State, there might have developed by that time a number of UHF educational activities, particularly if they could anticipate a day when all of your people in Colorado would be equipped with all-channel receivers, so that they could see educational programs?

Mr. DOMINICK. Then you anticipate that UHF stations outside this market will largely be educational TV?

Mr. COE. Well, I think you may also find in the foreseeable future that you may be using UHF translators in some of the areas; you have a great many VHF boosters there now to cover communities that don't otherwise get service.

Mr. DOMINICK. That is correct.

Mr. COE. Here, again, we may well find that we run out of VHF channels even for boosters, and a UHF translator for one of these little communities down in the valley behind the mountain or something could provide a service. So that, too, is another area for possible justification for the people of Colorado being forced to buy all-channel receivers.

Mr. DOMINICK. If I may say so, I think it is a pretty thin justification. That is all, Mr. Chairman, thank you.

The CHAIRMAN. Mr. Coe, I think you have an excellent statement, as I have stated before. I am sympathetic with some of the problems that you raise. I think we all strive for the best possible service that can be obtained and to be as competitive as possible. Diversity in our system in this country, I think, is the strength of the system. But as has been indicated by some of my colleagues, I cannot understand your position toward certain areas of the country which would be outside of the reach of UHF service. I understand you do say that UHF can provide those people within the 40-mile radius with excellent service.

Mr. COE. Approximately that area, varying, of course——

The CHAIRMAN. You can't cut it off at a particular line.

I can see many results which would flow from adopting a policy like that at this time in certain areas. Are we concerned only with those who live in that 40-mile radius?

Mr. COE. Not at all, sir.

The CHAIRMAN. Maybe because I come from the country, that is, a rural area, I am a little conscious of some of the rights and privileges of those people who live out beyond the reach of the 40 miles to Little Rock or Texarkana.

Mr. COE. I do, too, as a matter of fact.

The CHAIRMAN. What would you do about those people?

Mr. COE. I have tried to point out that our studies indicate that out beyond the service area of the UHF station there is now other service available to these people. You and I are living outside the 40-mile area of Little Rock.

The CHAIRMAN. Where do they come from?

Mr. COE. Other surrounding stations. And, as I say, they are detailed in this filing, sir, in each of these markets, just where the service comes from.

The CHAIRMAN. I looked at them, and I tried to compare. In going through two or three of them, I cannot reconcile your suggestion that others have service available to them, such as Madison, Wis., or the Champaign, Ill., areas, such as you outlined in your comments here. Of course, I may be wrong about it but your decision is based on the number of homes that are presently receiving service who would receive service if we adopt deintermixture.

Mr. COE. Well, as I tried to point out, sir, actually this deintermixture will for the first time give something around 4 million people a choice of 3 programs.

The CHAIRMAN. Yes, but at the same time I cannot agree that it will not deprive a number of people who are receiving even the one service. I feel pretty strong about this 1 sheep that is lost, being more concerned about it than the 99 who are not lost.

Mr. COE. Perhaps it would help the chairman if we would take one of these specific markets, and I will take our complete comments and let us discuss, for example, outside the 40-mile area from Champaign, Ill. Would that be helpful?

The CHAIRMAN. Well, it would. But I notice the number of pages contained in that one. It seems to be a lot more than the others. I don't think we want to stay here that long for it. I just wanted to raise the point, not that I expect to solve it with you.

Mr. COE. I was trying to conserve your time, sir, and find just a place here that would summarize it.

The CHAIRMAN. What page are you on, if you want to call attention to that?

Mr. COE. My distinguished colleague here suggests Madison, that is a very few pages.

The CHAIRMAN. All right; I did notice that that had less number of pages. That is page——

Mr. COE. 101.

And I think perhaps it would be well to turn to page 102.

The CHAIRMAN. Let's stop on page 101 first, in the middle of the page there.

Mr. COE. We were talking about service beyond the 40-mile radius, Mr. Chairman.

The CHAIRMAN. The way I see it. You show the total number of homes, and you have got the total number being served. And then the 40-mile radius, you have got the total number now being served—I mean the total number within the 40-mile radius, and the total that are being served in the 40-mile radius.

Mr. COE. That is correct. And then in the outer area we show homes able to receive the present VHF station in Madison at 96,400, which represents a percentage of 38 percent of the total number of TV homes in that outside area. But I was under the impression you were primarily concerned about, what does a listener do outside the 40-mile radius. And so on page 2 that is discussed. And with your permission, if you wish, I will be glad to review that.

The CHAIRMAN. Very well.

Mr. COE. WISC–TV signal in the outer area is 70 percent duplicated by surrounding CBS affiliates. In 19 of the 23 counties which comprise this area WISC–TV is completely duplicated by these other CBS affiliates. And reference there is to the charts which follow.

Three of the four counties where WISC–TV is not completely duplicated, Stephenson and Winnebago in Illinois, and Lafayette in Wisconsin, are served predominantly by ABC and NBC, by their affiliates in Rockford, Ill. See chart.

When this market becomes all UHF, it will be feasible for a third UHF station to be operated in Rockford, and therefore these homes will receive three network service by a combination of the three stations in Madison and the three in Rockford.

The remaining county, which is not completely duplicated, is Richland, Wis., which is situated just outside of the 40-mile radius. This county should continue to be partially serviced by WISC–TV as a UHF station, which in conjunction with CBS stations in LaCrosse and Cedar Rapids, should have effective service. An examination of the nighttime daily circulation for this area further attests to the fact that in 19 of the 23 counties—and these are counties we are talking about outside the 40-mile radius—the television service is predominantly via CBS affiliates other than WISC–TV. The remaining four counties are the same as those mentioned above, and will be effectively serviced, as already explained.

In view of the above, deintermixture of Madison should not affect the good CBS service to this area, but would improve the ABC and NBC service to the public, as the UHF penetration arises.

In addition to the improved television service to this area, deintermixture would enable the three stations in Madison to operate on a more competitive basis.

And on the following table, sir, is tabulated by county the number of TV homes and the homes that are available to receive the various stations that are listed heading the column.

Does that help to reassure you that if you are living 50 miles or 45 miles from Madison you would not be deprived of service?

The CHAIRMAN. No; It doesn't. It helps me to understand your argument, because I happen to know something about this fringe service myself. I know what it is to get fringe service in Little Rock from Shreveport.

Mr. COE. From where, sir?

The CHAIRMAN. Little Rock, Ark., from Shreveport, La., and Texarkana. I know there is a great deal of difference in getting the service where the snowflakes are all over it and getting it where you can see it. You have made a very good argument from your viewpoint.

Just one other thing. I don't want to prolong this. You make your presentation, and naturally I can understand that you should, primarily on the basis if being able to adequately compete. I am like Mr. Sibal, I believe that we should have competition. I think it is vital to our commerce. But I do not believe that we should have a policy in the country that every business ought to be able to compete with every other business regardless of the size of that business on an equal footing. In other words, I imagine there are a good many department stores in Dallas, Tex., that are unable to keep up with Neimann Marcus.

Mr. COE. That is correct.

The CHAIRMAN. But I don't think we ought to put them out of business down there because department store X can't supply the same thing as department store Y.

Mr. COE. Absolutely not, sir. But if you want to use that sort of a comparison, if we want to establish a department store in Dallas, we can't do it, there isn't any location, or else there is only a lot clear out on the outskirts of town, which we will call a UHF assignment. We are just asking for an equal opportunity to compete, that is all.

The CHAIRMAN. Yes; I know that is true. But I think there are, and I think you agree, that there are other elements that have to be considered than the mere fact that we are going to keep somebody in business that can compete completely with somebody else in the same business. In other words, I don't think you would suggest that we do away with all of the clear channel radio stations or the regional channel radio stations just because the local station at point B is not able to compete with them, would you?

Mr. COE. No, but I think today we face a little different situation in this VHF–UHF situation. As I think was pointed out earlier, and I sure don't want to get in the clear channel thing, this thing had been going on, it seems to me, so long as I have been in the business.

The CHAIRMAN. Yes, and this is going to go along as long as you are in the business, as we said today, unless some policy is decided.

And I recognize that I am not capable of telling the rest of the country what to do, and I don't think any other member of this committee could. But we are striving to do the best we can. And that is exactly what we are seeking in the course of these hearings here today.

Do you think there ought to be another network?

Mr. COE. If there are enough stations for it, it might be a good thing. I think probably at some time in the future there will.

But I would just like to emphasize on the subject we are discussing, all we are really asking for, Mr. Chairman, is that the Federal Communications Commission in the case of these eight rulemakings on deintermixture be allowed to consider all the facts, get the comments, get everybody's views on the thing, study each one individually and decide then.

The CHAIRMAN. I am in accord, I think, with your viewpoint that we ought not to prevent the Federal Communications Commission from doing what it determines to be in the public interest in any given case. I think we could give the Commission some policy direction. I am for that, and want to do what I can in that direction.

But I think it is a very, very important problem, and I just don't believe that your network is going to be affected one way or the other with eight markets in the United States.

Mr. COE. I wish I was convinced of that.

The CHAIRMAN. You are putting it on the basis that these eight markets involved here are going to determine the future of the American Broadcasting Co. I don't believe that, when there are as many UHF's as will come into existence. You are too big a company and too effective and efficient a company to let eight markets, in my judgment, which are involved here, to determine whether or not you are going to be able to compete with others in the same business.

Mr. COE. For the record, we will keep on competing in any event, sir.

The CHAIRMAN. And you are doing a good job, and I want to compliment you for it.

Thank you very much. We are grateful for your testimony. I kept you here longer than we intended, but since you are a competing network and a competing business, I think the committee should have the benefit of developing your thoughts as nearly as possible. And we appreciate your appearance here.

Mr. COE. Thank you, sir.

The CHAIRMAN. The committee will adjourn until 2 o'clock.

(Whereupon, at 1:10 p.m., the committee recessed, to reconvene at 2 p.m., the same day.)

AFTERNOON SESSION

The CHAIRMAN. The committee will come to order.

Mr. Wasilewski, I understand that you have a statement you wanted to file?

Mr. WASILEWSKI. Yes, Mr. Chairman.

STATEMENT OF VINCENT T. WASILEWSKI, EXECUTIVE VICE PRESIDENT OF THE NATIONAL ASSOCIATION OF BROADCASTERS

Mr. WASILEWSKI. My name is Vincent T. Wasilewski, executive vice president of the National Association of Broadcasters. On behalf of the NAB I would like to present for the record the statement of NAB President LeRoy Collins. As indicated in the statement, its contents do not represent the unanimous views of our members. For example, Mr. Coe, speaking for ABC this morning, represents a network member of NAB, but it obviously disagrees with our organization's position in this matter.

(The statement referred to follows:)

STATEMENT OF LEROY COLLINS, PRESIDENT, NATIONAL ASSOCIATION OF BROADCASTING

Mr. Chairman, and members of the committee, my name is LeRoy Collins. I am president of the National Association of Broadcasters, located at 1771 N Street, NW., Washington, D.C.

As of March 1, our membership consisted of 380 television stations, 2,394 AM and FM radio stations, as well as the 3 television and 4 nationwide radio networks.

We appreciate the opportunity to present our views on these several legislative proposals: H.R. 8031, introduced by the chairman at the request of the Federal Communications Commission; H.R. 9267; and additional bills and resolutions, all dealing with all-channel receiver legislation and television allocations.

On June 15, 1961, Federal Communications Commission Chairman Newton N. Minow sent to the House of Representatives a draft bill, together with an explanatory statement. With reference to its responsibility to facilitate the development of a nationwide competitive television service, the Commission stated:

"After very comprehensive study over the past several years and repeated explorations of every possibility that has been suggested, we believe the most feasible course with a reasonable prospect of success is the enactment of the legislation to promote the distribution of all-channel receivers."

Since the Commission issued its "Sixth Report and Order" on April 11, 1952, the Congress has had under consideration various proposals dealing with television allocations. And several of the proposals before you today attempt to cope with this problem by promoting greater distribution of all-channel receivers.

Using a different approach in 1957, but in an effort to accomplish the same broad objective, Chairman Harris of this committee and Chairman Magnuson

of the Senate Committee on Commerce strongly urged the elimination of the excise tax on all-channel television sets. This was designed to encourage the manufacture and distribution of all-channel receivers "as the only step that offers a practical way out of the UHF problem." This proposal was supported by NAB but did not materialize.

The National Association of Broadcasters, representing a large and diverse television membership, has been deeply interested in all congressional hearings relating to television allocations. We have always favored the sound expansion and improvement of television service and, as a means to this end, the greater utilization of the UHF band, but not to the detriment of the VHF band.

In testimony before a Senate subcommittee more than 7 years ago (June 16, 1954), our organization took the position that:

"Our responsibilities to the people now indicate that we should combine our voluntary contributions of know-how and planning to resolve the two really outstanding problems before us; namely, securing more adequate and attractive program service for all television stations to garner larger listening audiences, and seeking to reach the optimum of all-channel television receivers in the hands of the public."

It was apparent several months ago that hearings would be held during this session of Congress on the proposed legislation you now have before you. Therefore, the matter was fully explored at the recent meeting of the NAB board of directors. Following lengthy deliberation on the matter, the NAB television board of directors adopted the following resolution:

"*Be it resolved*, That the television board of directors of the National Association of Broadcasters endorses the concept of legislation which would authorize the FCC to require that television sets transported in interstate commerce be capable of receiving both VHF and UHF signals and at the same time preclude any action by the Commission which would delete VHF assignments."

On the following day this position was reaffirmed by the full membership of the joint television and radio board of directors.

Thus, although we endorse the objectives sought by H.R. 8031, such support is conditioned upon assurance that no VHF assignment presently granted will be supplanted by an assignment in the UHF portion of the spectrum. This safeguard is neither explicit nor implicit in H.R. 8031. It is, however, contained in H.R. 9267. For this reason, therefore, we endorse this latter bill.

In mid-1959 (docket No. 11997), NAB advised the Federal Communications Commission of its position that the VHF channels—2 through 13—provided the heart of the television allocations structure. We stressed that it was this portion of the spectrum that was best capable of providing the overwhelming majority of the American people with television service. We added that it was in this portion of the spectrum that there had been the predominant public investment in receivers. We urged that the VHF band be retained as the basis for any overall allocation plan. We strongly adhere to this position.

There is no question that the general availability of all-channel receivers will serve to promote the growth of service in the UHF portion of the spectrum. But service in the VHF and UHF bands should complement each other. The public will benefit from the growth in UHF service only so long as it can continue to receive VHF signals. We do not believe that VHF facilities presently serving the public in hundreds of communities should be deleted. Such action would deprive literally thousands of television homes of service and, at the same time, destroy enormous private investments in broadcast installations.

Further, we feel that the language of H.R. 8031 is too broad. I understand that many witnesses, including the Chairman of the Federal Communications Commission, agree that clarifying and limiting language is required to remedy this defect; and so I shall not here labor this point further.

Incidentally, I do not want to leave the impression that every member of NAB supports the views I have expressed here today, because this is certainly not the case. We have members who would vigorously oppose these views. But at the same time we are certain that the positions taken represent the strong consensus of our membership and the specific and express finding and determination of our board of directors.

Thank you, Mr. Chairman.

The CHAIRMAN. We are glad to welcome our colleague, Mr. Ayres, of Ohio, who has a group of people that he will present for their presentation and a few comments.

STATEMENT OF HON. WILLIAM H. AYRES, A REPRESENTATIVE IN CONGRESS FROM THE 14TH CONGRESSIONAL DISTRICT OF THE STATE OF OHIO

The CHAIRMAN. Mr. Ayres, you may proceed.

Mr. AYRES. Mr. Chairman and members of the committee, realizing the problem that you are confronted with, I requested that I be able to make a statement in behalf of the two witnesses who would have appeared.

Mr. Martin Essex, who is superintendent of schools for the city of Akron and a past president of the School Administrators Association for the United States, will concur in the statement that I make.

Also, Mr. Robert E. Shuff, vice president of the AFL–CIO and one of our most respected labor leaders in the State of Ohio, also concurs in the statement that I shall make.

As you know, I am the Representative in Congress from the 14th District for the State of Ohio. As I understand it, the purpose of these hearings is to consider the chairman's bill, H.R. 8031, which would give the Federal Communications Commission authority to require that all television receivers shipped in interstate commerce would be able to receive UHF as well as VHF channels and the bills introduced by Congressman Roberts, H.R. 9267; Congressman Moss, H.R. 9277; Congressman Anderson, H.R. 9291; Congressman Hemphill, H.R. 9298; and the bill of our late colleague, H.R. 9322, which in addition to providing for all-channel receivers, would prohibit the deletion of any previously assigned VHF stations and on H.R. 9349, introduced by our colleague, Congressman Mack, and House Resolution 450, 457, and 469, introduced by Congressmen Thomson, Andrews, and Grant, respectively, which are designed to prevent, either temporarily or indefinitely, the substitution of UHF channels for VHF channels in communities where such VHF channels are now assigned.

First, I want to say, Mr. Chairman, that I will support H.R. 8031, because I understand that there is general agreement, both on the FCC and in the television broadcast industry that in order to have an adequate television system, we must make use of the UHF channels and that if all-channel receivers are available throughout the Nation, the possibilities for making use of the 70 UHF channels will be substantially enhanced.

As testified by Chairman Minow last Tuesday, this bill represents a long-term solution to the full utilization of all channels, the 12 VHF and the 70 UHF.

However, several years will elapse before this plan starts to function because of delays resulting from the necessity of establishing standards for all-channel receivers, possible court appeals, tooling-up time, and so forth.

And in my judgment, it will probably take 10 years to become fully operative. Therefore, this is not enough. An interim or short-range program must also be put into effect at once if any faltering UHF stations in important markets are to be saved.

This short-range plan which the FCC proposed in addition to all-channel receiver legislation, is known, as you know, Mr. Chairman,

as selective deintermixture. Selective deintermixture will accomplish two things: First, it will permit us to have now in a substantial number of important markets competitive multistation service instead of the virtual monopoly situations resulting from the presence of a single VHF station in these markets.

These single VHF stations have the same advantage over their UHF competitors that a man armed with a tommygun would have in a duel with an adversary who had only a bow and arrow.

And as you know, Mr. Chairman, this is not equal competition and must be rectified now. This is one reason why the long-term, all-channel legislation is not enough and must also be accompanied by the short-term or interim solution of deintermixture where found feasible in such of the eight areas now being considered by the Commission.

In addition, selective deintermixture will make available now additional VHF service which is badly needed. The VHF channels removed from the deintermixed areas can in some cases be reassigned to other areas which are so heavily saturated with the VHF only.

Then these receivers which are only VHF only cannot make use of their UHF channel until a long-range solution becomes effective, or alternatively, these VHF channels can be reserved for educational use.

Thus, deintermixture can improve the allocation in both directions.

Now, my purpose in appearing here today is to urge that this great committee not give its approval to any legislation which would limit the FCC's authority to make changes in VHF allocations. I understand that the purpose of such legislation is to forbid the Commission to put into effect a policy generally referred to as selective UHF deintermixture.

There are and have been strong public interest considerations favoring the policy of selective UHF deintermixture. Committees of both the House and Senate, beginning in 1954, made extensive investigations of television allocations and, as you know, in 1956–57, both strongly endorsed selective deintermixture, in fact, on July 23, 1956, released an interim report in the television allocations phase, pursuant to Senate Resolution 13 and Senate Resolution 163, and in that report, the committee stated, and I quote:

> The committee therefore, commends the action of the Commission in adopting this policy (selective deintermixture) as an important part of its overall program. It is worth noting that this is actually the only major action being taken by the Commission at this time which holds promise of furnishing prompt assistance and encouragement to UHF broadcasting and are promoting the preservation of the UHF band.

The Antitrust Subcommittee of the House Committee on the Judiciary reached a similar conclusion in its March 13, 1957, report. This report was on the VHF–UHF problem, and this was pursuant to House Resolution 107, 87th Congress, 1st session. This was found on page 20, and I quote:

> The committee recommends that pending the outcome of the proposed program of research and development concerning the feasibility of a major shift to UHF, the Commission vigorously pressed forward in its program of selective deintermixture, of which its reports and orders of February 26, 1957, are a partial result.

I would like you to pay particular attention to the balance of the quote:

> The Commission should broaden its program to include more markets if feasible in the public interest and should continue to order the removal or conversion of existing stations where the public interest requires.

The situation in television allocations has not changed significantly since these investigations were made and these reports issued. Frankly, I know of no sound reason why the conclusions reached in 1957 are not as valid today as they were then. On the contrary, I believe that the situation has become more acute and that the necessity for deintermixture has become more pressing. Since the FCC did not fully carry out the 1956–57 recommendations of the Congress, we now have fewer UHF stations than we had in 1956, and unless immediate relief is forthcoming through deintermixture, many of the remaining UHF stations will be forced to close down.

Mention has been made of the fact that since 1957, the Commission has permitted some VHF stations to go on the air in some of the areas which it now proposes to deintermix. The important fact, however, that is in such areas UHF is still alive, can still be saved if deintermixture is properly undertaken, and in such event, can provide fully adequate service to the public in these areas.

Furthermore, I would like to point out that in 1957, the Antitrust Subcommittee of the House Committee on the Judiciary specifically recommended:

> The removal or conversion of existing VHF stations where the public interest requires.

Some of the comments and testimony before this committee have seriously objected to deintermixture because of the extra expense that the viewers in some areas would be put to in order to convert their receivers to UHF.

Of course, the public should not be put to extra expense if it is not necessary.

But unfortunately in this incident, it is unnecessary. The hard fact is this: Literally everybody agrees that there just are not enough VHF channels to go around. Consequently, we either have to be satisfied with what is an obviously inadequate television service, or at least some people have to spend the money to be able to receive UHF.

As a matter of fact, a considerable portion of the public has already been required to spend the money for UHF and has been willing to do so in order to get the television service which they wanted.

Now, my hometown, Akron, Ohio—in Akron, it has been necessary to convert to UHF in order to receive the local station. The great majority of our people have done so. Similarly, in a number of areas which are all UHF—for example, Youngstown, Ohio, which is just a few miles, comparatively speaking, from Akron where our distinguished colleague, Mr. Kirwan, is the Representative—there the viewers have 100 percent converted to UHF, because UHF is their television means.

Now, are these persons second-class citizens? No voice has been raised to protect the extra expense they have been put to in order to receive UHF. Now, why? Why should it be raised now?

Finally, it would seem strange to me that we should be so greatly concerned that deintermixture would require a relatively small number of people to purchase UHF equipment, which extra expense would assure them of getting multistation competitive television service, and at the same time that we are seriously considering the passage of legislation which would require everyone in the country to make the same expenditure.

I am opposed to the proposed legislation, which would tie the hands of the FCC, because I feel that it would involve the Congress in the details of television allocations which I do not think we are equipped to handle and because it would preclude the Commission from redressing some of the inequities which have resulted from the allocation plan adopted by the Commission in 1952, which was based upon an erroneous assumption that UHF stations would be able to compete effectively with VHF stations in the same areas.

Such an inequity was created in Akron, Ohio.

Now, let us go back for a moment. Before the 1948–52 freeze, Akron was assigned a VHF channel, channel 11. An effort was made to put this channel in operation. But this failed through no fault of the Akron community. WAKR, a radio station in Akron, made application for the prefreeze Akron VHF channel as early as December 1947. However, there were competing applications and the Commission did not reach a decision on these applications in time so that the WAKR application was caught in the freeze.

In reaching its 1952 allocation plan, the FCC proceeded upon an assumption—and this is so important, Mr. Chairman—that UHF stations would be able to compete with VHF stations and, relying upon this assumption, the Commission took channel 11 out of Akron and left it with only UHF channels.

In the same pioneering spirit which prompted its 1947 VHF application, WAKR promptly applied for one of the three UHF channels which the Commission allocated to Akron in 1952.

The other two UHF channels in Akron have never been used. As I proceed, I think you will see why.

That application was granted and station WAKR–TV went on the air on a UHF channel 49 in June of 1953, having incurred a capital investment to get on the air in excess of $500,000. In the nearly 9 years that WAKR–TV has been on the air, it has made every possible effort to promote UHF and has provided an excellent local program service. But despite all its efforts, it is still losing money heavily, and as long as it stays on a UHF channel it will continue to lose money.

Mr. Bernard Berk, a gentleman that I knew long before I was in Congress, is the president and majority stockholder in WAKR–TV. He is to be highly commended for the great efforts he has made to provide a local Akron television service. Frankly, the obstacles and losses he has encountered are such that they are a great tribute to his sense of public service responsibility. It is amazing to me that he has lasted this long. But his losses are now becoming staggering and I do not see how any of us can expect him to absorb them forever. Thus, unless something is done, WAKR–TV will be forced off the air and the 500,000 residents of the Akron area will be left entirely without local television service.

Now, let me explain why WAKR–TV has had so little success in establishing its UHF operation. Akron is approximately 22 miles from the transmitters of the three Cleveland VHF stations which have been in operation since before the freeze. These stations utilize transmitter sites lying between Cleveland and Akron, with the result that they put excellent signals into the Akron area.

And at this point, I would like to go off the record for just a moment.

The CHAIRMAN. Off the record.

(Off the record discussion.)

The CHAIRMAN. On the record.

Mr. AYRES. But because the Akron market is overshadowed by these nearby three VHF signals from Cleveland, Akron is in the VHF market and is so considered by the advertisers who provide the revenues necessary for successful station operation and who buy a VHF station in preference to a UHF where VHF is available.

As long as WAKR–TV is on a UHF channel, it cannot compete effectively for national advertiser revenues, which are the lifeblood, as you gentlemen know, of any television station operation, since they represent the greatest portion of its revenue.

Now, in contrast, over in Mike Kirwan's district, in Youngstown, which is only 25 miles away from Cleveland, it is able to support four UHF stations. There are four UHF stations in Youngstown, a market much smaller than Akron. But since Youngstown is not overshadowed by VHF stations like in Akron, it is considered an all-UHF area, and advertisers buy enough time there to enable four stations to operate profitably.

This, to me, shows why deintermixture is so vital.

Now, as I have said, the Cleveland VHF stations provide good signals in Akron and can supply Akron with national network programs, all of the movies, all the things that are on television, as all three networks are covered.

But they do not and very probably cannot, because of demands of their own community, provide any of the local television service needs of Akron, which is a community entirely separate and apart from Cleveland.

And it has been so found by all recognized agencies, including the Census Bureau and the FCC.

The Cleveland stations also do not provide an advertising service to our local merchants, who cannot afford to pay their high rates which are based upon coverage of Cleveland, as well as Akron, and very few people drive from Cleveland to do their shopping in Akron.

WAKR–TV, on the other hand, has provided excellent local service in broadcasting good entertainment programs, including top available movies in early evening hours, some ABC–TV programs, including some not carried in Cleveland, as well as many local public service programs, such as local news, church programs, civic programs, political programs, school programs, athletic events, and educational courses for credits, presented by both our university and public school systems.

I need not tell you how important these local services are to a community. In my own case, for example, my district includes only two counties, Summit, of which Akron is the county seat, and Medina

Counties. I and opposing candidates for Congress in the 14th District, as well as all other city and county candidates for office, cannot afford to pay Cleveland prices for our television time.

We must depend on a local Akron station, and most times, the proponents and opponents of local bond issues and other matters of local public concern try to get their story across through the media of television.

On election night, even after the ballots have been counted, we have to depend on WAKR–TV to bring us the full and complete returns. Cleveland could not care less about what happens in Akron and we get nothing from the Cleveland station.

These services will be completely lost to the large Akron area unless WAKR–TV is provided with a VHF channel.

Now, the all-channel receiver legislation will not, in itself, solve the problem for Akron. Because of the efforts of WAKR–TV Akron presently has and had for some time substantially complete UHF conversion. But in spite of the availability of a large number of UHF sets, the competitive advantages of three VHF stations in nearby Cleveland are so great that WAKR–TV has not been able to make a go of that on UHF.

Thus, we already have in Akron substantially what the all-channel receiver legislation would accomplish for other areas, and believe me, it is not enough.

There is a reason for this. Even where a UHF antenna is properly installed, is the shorter life of the UHF oscillator tube, which is the heart of the UHF set.

This frequently means that the set, a few months after it has been installed, will no longer pick up UHF signals, but will continue to pick up VHF for years.

In a market where the signals of three VHF can easily be viewed, there is little incentive for the set owner to go to the expense of having the UHF portion of his set put back in working order. This they will do in areas where UHF signals alone are available, like in Youngstown, Fort Wayne and other areas, but not where a variety of program fare can easily be received from other sources.

In short, the mere fact that 83 percent of the sets in Akron, when installed, were equipped to pick up our UHF station does not mean that they are able to do so 6 months later.

And I would like to go off the record here for just a moment.

The CHAIRMAN. Off the record.

(Discussion off the record.)

The CHAIRMAN. On the record.

Mr. AYRES. Our experience has shown that this is exactly what happens in an overshadowed market such as Akron, where despite its high original conversions, WAKR–TV comes up with a weekly net circulation of only 42,000 TV homes in an area of 146,800 TV homes.

Mr. Chairman, you have been very patient, but for these reasons that I have stated, it seems clear to me that the Congress cannot treat the subject of FHF assignments and reassignments on an across-the-board basis and simply freeze the VHF allocation plan as it exists today, which is what the proposed legislation would do.

Therefore, if the Congress is going to legislate on the question of VHF allocations, it would have to be on a case-to-case basis, just as it would be done by the Commission. I think that we can all agree that we in the Congress are much too busy and have too many more important things to consider to get into the subject of VHF allocations on a case-to-case basis.

This is a job which I believe has to be done by the FCC, which has the time and the staff while we do not. If, contrary to my view, this committee feels that it must instruct the FCC not to deintermix, it should not, I submit, simply freeze the present VHF allocation plan with all its inadequacies and inequities.

If we are going to tell the Commission what to do about deintermixture, we should go one step further and instruct the Commission to find VHF channels for Akron and for the other important communities, which cannot enjoy effective local television service except on VHF.

Thank you very much.

The CHAIRMAN. Let me say to our colleague, we are very happy to have your statement, bringing to us your interest in this problem out of your own experience in your community.

Mr. Springer?

Mr. SPRINGER. I have just one question, Mr. Chairman.

What the gentleman from Ohio wants is a VHF for WAKR. Is that substantially the situation?

Mr. AYRES. As I stated in my statement, based on the experience we have had there, the only way Akron could be served, like other communities throughout the United States are being served, is to have a VHF channel.

Mr. SPRINGER. You had one assigned there and it was taken away; is that right?

Mr. AYRES. We had one assigned and it was caught in this freeze, as stated in the statement.

Mr. SPRINGER. After the freeze was over, you did not have one?

Mr. AYRES. After the freeze was over we had no UHF channel, but as Mr. Berk can state, and I think it is available to you gentlemen, at the time it was an honest mistake. The Commission did not deliberately lead any of these small businessmen down the road to ruin. They felt at that time that UHF could serve in an area primarily served by VHF. But the experience WAKR has received has proved that to be erroneous. It is an honest mistake, but a mistake I think should be corrected.

Mr. SPRINGER. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Younger?

Mr. YOUNGER. As I understand your position and experience, it is that in a community where you had all of the receivers that were equipped for receiving both VHF and UHF and you had VHF and UHF transmitters, the UHF still could not compete?

Mr. AYRES. That is correct.

Mr. YOUNGER. Could they compete if they were both members of networks?

Mr. AYRES. No, members of the network, really, Congressman Younger, does not enter into it. Because in Akron, we have——

Mr. YOUNGER. They do not have what?

Mr. AYRES. I say that really does not enter into it, because in Akron, WAKR is an ABC affiliate. We have an ABC affiliate in Cleveland.

The problem, as I have attempted to point out here, is that the complications involved in servicing converted to UHF are such that where people can get everything they want covered outside their local community on VHF, that is where they are going to tune and our problem in Akron is that we cannot ask Mr. Berk to continue to lose money as he has been losing it to provide this community service. But if he had the VHF, he would share in the advertising dollar on a national advertising basis, which he now is not able to do.

He——

Mr. YOUNGER. And you would recommend H.R. 8031, but nothing in regard to the deintermixture legislation?

Mr. AYRES. Well, now, the number of the bill——

Mr. YOUNGER. Well, the 8031 or similar bills for the——

Mr. AYRES. I support, yes, H.R. 8031. But by the same token, unless something can be done to correct the situation in Akron, H.R. 8031 is not going to save the only television station that a community of 500,000 has.

Mr. YOUNGER. Thank you, Mr. Chairman.

The CHAIRMAN. I understand that in addition to testifying for yourself, you are expressing the views of Mr. Bernard Berk, president of WAKR–TV in Akron.

Mr. AYRES. That is correct; and also, as I stated——

The CHAIRMAN. Mr. Martin Essex, Mr. Robert Shuff, and you also speak for Mr. Charles Harris?

Mr. AYRES. The Veterans——

The CHAIRMAN. The Veterans of Foreign Wars representative?

Mr. AYRES. That is right.

And I might say this, Mr. Chairman, that in my judgment, I speak for every citizen of my community, because this is a very, very serious problem, and if each and every one of them had had an opportunity to express their views, I feel confident that they would concur in what you have heard today.

The CHAIRMAN. Thank you very much, Mr. Ayres.

We are very glad to have your testimony.

Mr. Mark Evans.

STATEMENT OF MARK EVANS, VICE PRESIDENT OF PUBLIC AFFAIRS METROMEDIA—METROPOLITAN BROADCASTING

Mr. EVANS. In view of your crowded agenda, first may I say thanks to you, Mr. Chairman, and to the members of this committee for allowing my statement to be put in at this late hour.

And as an expression of thanks, my remarks are going to be extremely brief.

I hope you will not accept that, however, as a lack of zeal for our cause. First, we think it is a very just cause, and, second, much of what I would say would probably be repetitive to what Mr. Ayres has said and others who feel as I do about this bill.

My name is Mark Evans and I am vice president of public affairs for Metromedia, of which Metropolitan Broadcasting is an operating division.

Metromedia, through a subsidiary, presently operates a television station in Decatur, Ill., WTVP, affiliated with the ABC Television Network, and also operates a UHF translator station in Champaign-Urbana, Ill. Metropolitan has operated WTVP since 1960, and established the UHF translator station in 1961.

As we understand these hearings, interested parties are to present their views on Congressman Harris' all-channel bill, H.R. 8031; on the bills introduced by Congressman Roberts, H.R. 9267; Moss, H.R. 9277; Anderson, H.R. 9291; Hemphill, H.R. 9293; and Mr. Riley, H.R. 9322, which, in addition to providing for all-channel legislation, would prohibit the deletion of any previously assigned VHF stations; and on H.R. 9349, introduced by Congressman Mack, and House Resolutions 450, 457, and 469, introduced, respectively, by Congressmen Thomson, Andrews, and Grant, which seek to prevent, temporarily or indefinitely, the substitution of UHF channels for VHF channels in communities in which such VHF channels are now assigned.

Metropolitan fully supports H.R. 8031, which we believe would be of help in fostering expansion of television service in the United States.

At the same time, Mr. Chairman, we respectfully but firmly oppose enactment of the other bills and resolutions to which I have referred which would prevent or inhibit the Federal Communications Commission from considering and using selective deintermixture. We believe that deintermixture, in some areas of the country, is essential to foster expansion of television service and to establish truly effective competition among television stations.

One area where the Commission should certainly be left free to consider deintermixture is Decatur-Springfield-Champaign-Danville, Ill.—the market in which Metropolitan now operates its UHF stations. In that area we operate in direct competition with the VHF station on channel 3. Our experience has been that because of the very considerable competitive advantages inherent in the VHF operation, WTVP is unable to compete effectively; to expand its service; or to provide the amount of live and public service programs which we know we are able to do in those areas where direct VHF television competition exists.

WTVP has operated at a loss since commencing operations. So long as channel 3 remains in commercial service in competition with WTVP, profitable operations will be very difficult to achieve. Obviously, this situation can not be permitted by us to continue indefinitely. Continued existence of VHF poses a constant threat to our economic success. The situation in this area is such that, plainly and simply, without the relief that could be provided by deintermixture, WTVP may ultimately be forced to cease operations, leaving the area with but two television stations.

I will not here dwell in detail on the pros and cons of deintermixture. You have heard many other witnesses discuss the problem in detail. I will emphasize that, as you have heard David Steel, engineering consultant for WTVP, testify, the operation of WCIA can be shifted from VHF to UHF without depriving any person of the service of WCIA or of his only television service.

We believe that the Commission should be left free to consider and dispose of deintermixture proposals as they arise. In light of the rapidly changing economic programing and other factors which have marked, and we are sure will continue to characterize the television industry, we feel sincerely that it would be a serious mistake for the Congress to deprive the Commission of the flexibility which we feel essential to insure proper regulation of the television industry in the best interests of the public.

Thank you, sir.

The CHAIRMAN. Mr. Evans, thank you very much for your very precise, brief, and clear statement. Mr. Springer?

Mr. SPRINGER. Mr. Chairman, may I say to Mr. Evans, this is an excellent statement of your position. I am completely familiar with WTVP and its operation, and have been since its inception. I have known all the problems, long before Metropolitan was ever heard of.

Mr. EVANS. I am aware of that, sir.

Mr. SPRINGER. I lived with it. They wanted to do a lot of things which should have been done that did not get done in the early days, that I think would have been good. I sat in on one conference where there was a voluntary agreement to relinquish rights which WCIA had on programs providing that it could be worked out, because WCIA wanted to see WTVP succeed. It was on the air before WCIA, may I say. So there have been some real problems in connection with it.

May I say that your service has been good, too.

Mr. EVANS. Thank you.

Mr. SPRINGER. I know your area, I know what you cover. I want to say that the programing and your staff is constantly improving. I was in less than a month ago on your premises for an inspection to see what was done.

Your news programing has improved. There are a whole lot of things that are good.

We may differ a lot as to what the engineering facts are with reference to whether or not you will succeed. My findings are a little at variance with your findings here on the financial situation and also with respect to engineering. But I do want to see WTVP succeed.

Mr. EVANS. Thank you, sir. We feel, Mr. Springer, that all we have to go on is what our engineers tell us. All you have to go on, if you feel the other way about it, is what the opposition engineers feel about it. Our position is that it is conceivable, we both might have biased engineers.

Therefore, we think it might be well to turn it over to the FCC, who may be unbiased.

Mr. SPRINGER. Ultimately, the FCC may have to make the decision, but at this point, I am saying that the engineering I have been able to gather, I believe, is fairly accurate. I do not have to listen to your side to know about engineering, I think, having been with this from the time you put your first 2 by 4 on the ground out there and also from the time that WTVP put its first 2 by 4 onthe ground.

I know the history of these stations and the power and what you can serve and your rates. So I think I do know something about WTVP.

Anyway, however that may be, you have a good station.

Mr. EVANS. We hope to make the 2 by 4 a 4 by 4.

The CHAIRMAN. Mr. Younger?

Mr. YOUNGER. I have no questions. I am not as familiar as our colleague is with all of your background, but I very definitely understand what your position is.

Mr. EVANS. Thank you, sir.

The CHAIRMAN. Mr. Thomson?

Mr. THOMSON. Mr. Chairman, I would just like to ask when channel 3 came on the air.

Mr. EVANS. I am not aware of that, sir. We came in in 1960.

Mr. THOMSON. And was channel 3 already on the air?

Mr. EVANS. Yes, sir.

Mr. THOMSON. And now you ask the Commission to take channel 3 off and convert it to a UHF station?

Mr. EVANS. We came in after channel 3 and WTVP were on the air. We bought WTVP, so we were not in on the original decision or application.

Mr. THOMSON. That is all.

The CHAIRMAN. You have been competing with channel 3 from Champaign?

Mr. EVANS. We have been attempting to, sir.

The CHAIRMAN. How much of an area do you serve out of Urbana?

Mr. EVANS. We have just been given a translator in Champaign-Urbana, which is serving that community—trying to serve that community.

The CHAIRMAN. You are serving Champaign now by translator?

Mr. EVANS. That is right, sir.

The CHAIRMAN. How is it working out?

Mr. EVANS. It is in the beginning stages. It is satisfactory for a small area. I think Mr. Springer could probably testify to that better than I can.

Mr. SPRINGER. It covers an area only slightly larger than the area of Champaign-Urbana. Really, what you would say is that your market area is composed of the cities of Champaign and Urbana. That is a community of some 70,000 people.

Mr. EVANS. Yes, sir.

The CHAIRMAN. Thank you very much, Mr. Evans, we appreciate having your statement here.

Hon. Earl D. James, mayor of Montgomery, Ala.

I believe, Mr. Mayor, you have with you the Honorable Leland G. Enzor, your probate judge, from Covington County, and Mr. Charles C. Turner, Jr., dean of students, Huntingdon College, Montgomery.

I also understand that you have a train you have to catch.

STATEMENT OF HON. EARL D. JAMES, MAYOR, CITY OF MONTGOMERY, ALA.; ACCOMPANIED BY HON. LELAND G. ENZOR, PROBATE JUDGE, COVINGTON COUNTY, ALA., AND CHARLES C. TURNER, JR., DEAN OF STUDENTS, HUNTINGTON COLLEGE, MONTGOMERY, ALA.

Mr. JAMES. That is correct.

The CHAIRMAN. We will be glad to have your statement.

Mr. JAMES. Mr. Chairman, I realize that time is a factor. I also realize further that there are many men here who wish to testify who

have been here longer than I. I also further realize that you would like to get away from here before midnight.

You have a prepared statement from me that I would like to be entered into the record of this committee.

My name is Earl D. James. I am the mayor and the president of the commission of Montgomery, Ala. I shall read only parts of my statement, if it is possible.

I am appearing before this committee, in that capacity, as mayor, to support the legislation proposed in H.R. 9267, introduced by Congressman Kenneth Roberts, of Alabama.

The people of Montgomery and of a wider area in central and southern Alabama are vitally and directly concerned with this legislation for the reason that under the Federal Communication Commission's current television allocation proposals, we may stand to lose our only wide-coverage VHF television service in Montgomery.

We believe first that Montgomery, as the capital of Alabama, needs a wide-coverage VHF television station in order to properly disseminate important news and information relating to the Alabama Legislature, the Governor's office, and the departments and agencies of the State government, as well as the agencies of the U.S. Government.

The headquarters of the State of Alabama civil defense system is in Montgomery and this agency should have the widest possible television coverage for advance instruction and indoctrination as well as for communication in the event of national emergency.

The advertising potential of Montgomery's, in which I am greatly interested, retail and wholesale merchants would be greatly reduced by the removal of channel 12, with the resulting loss of revenue having a significant adverse effect upon the economic well-being of Montgomery and its citizens. Other surrounding markets with multiple VHF wide-coverage assignments such as Birmingham, 98 miles north, Mobile, approximately 213 miles south, and Columbus, 85 miles to the east of us, would obtain a distinct economic advantage over Montgomery within Montgomery's natural trading area.

Montgomery's VHF channel, of course, is important not just to the people of Montgomery and its immediate metropolitan area. Montgomery is the center of a wide and sparsely populated area in central and southern Alabama.

State agencies charged with the welfare of the citizens of Alabama, such as the Alabama Civil Defense Department, the Alabama Public Service Commission, the Alabama State Planning and Industrial Development Board, the State of Alabama Commission on Alcoholism, and the Central Alabama Rehabilitation Commission, have opposed the deletion of channel 12, expressing concern as to the adverse effects which the removal of channel 12 would have upon their activities, and upon the citizens of the State.

Farm and rural organizations, including the Alabama Farm Bureau Federation, have vigorously opposed this action which would deprive thousands of people in rural and farm areas of much-needed television service—in some instances, of their only service.

The Alabama State Chamber of Commerce, the Montgomery Chamber of Commerce, and the chambers of commerce of numerous cities throughout the area have expressed their opposition in view of the adverse effect which the removal of channel 12 would have upon the area's business and industrial development and economic well being.

Civic, community, and professional organizations throughout the area, such as, in the case of Montgomery, the Montgomery Bar Association, the Montgomery Lions Club, the Montgomery Kiwanis Club, Men of Montgomery, the Downtown Business Association of Montgomery, the Exchange Clubs of Downtown Montgomery, and of East Montgomery, and the Montgomery Civitan Club are opposed. Educational leaders in our area have indicated their firm opposition to removing channel 12. Literally hundreds of individual citizens who would lose the service of channel 12 have expressed their concern and opposition in letters and petitions.

We point the above out to give this committee a concept of the overwhelming opposition in Montgomery and the State of Alabama to the removal of the only wide-coverage VHF service from the State capital.

In summary, we believe that the retention of wide-coverage VHF television in Montgomery is essential. We also believe that it is highly desirable to encourage the expansion of UHF television by such steps as assuring that television sets be capable of receiving both VHF and UHF signals. Accordingly, we respectfully urge that H.R. 9267 or similar legislation be favorably reported by this committee and passed by the Congress.

I thank the committee for this opportunity to appear and present these views.

Thank you very much.

The CHAIRMAN. Mr. Mayor, thank you very much for your statement on behalf of yourself and the other gentlemen whose names were mentioned by me. Of course, their names will appear in the record as expressing an interest along with you as expressed in your statement. Your entire statement will be included in the record, together with the copy of the resolution, I suppose, referred to, which is attached to your statement. You wish it to be inserted, too?

Mr. JAMES. That is right, sir.

The CHAIRMAN. It will be made a part of the record.

(The complete statement of Hon. Earl D. James, and attachments, are as follows:)

STATEMENT OF EARL D. JAMES, MAYOR AND PRESIDENT OF THE CITY COMMISSION, MONTGOMERY, ALA.

Mr. Chairman and members of the committee, my name is Earl D. James. I am the mayor and the president of the City Commission of Montgomery, Ala. I am appearing before this committee in that capacity to support the legislation proposed in H.R. 9267, introduced by Congressman Kenneth Roberts of Alabama, which would prohibit the Federal Communications Commission from deleting VHF television assignments for the purpose of effecting UHF deintermixture and, at the same time, provide for the development of UHF television by authorizing the FCC to require that television sets transported in interstate commerce be capable of receiving both VHF and UHF signals.

The people of Montgomery, and of a wide area in central and southern Alabama, are vitally and directly concerned with this legislation for the reason that under the FCC's current television allocation proposals we may stand to lose our only wide-coverage VHF television service in Montgomery.

There is no apparent disagreement that the inherent coverage potential of UHF is substantially less than that of VHF television. We do not believe that it can be in the best interests of the people of Montgomery or of the State of Alabama to substitute an inferior UHF service for the wide-coverage VHF television service now available from the State capital.

We believe, first, that Montgomery, as the capital of Alabama, needs a wide-coverage VHF television station in order to properly disseminate important news

and information relating to the Alabama Legislature, the Governor's office, and the departments and agencies of the State government, as well as the agencies of the U.S. Government.

The headquarters of the State of Alabama civil defense system is in Montgomery and this agency should have the widest possible television coverage for advance instruction and indoctrination as well as for communication in the event of national emergency.

The advertising potential of Montgomery's retail and wholesale merchants in which I am greatly interested, would be greatly reduced by the removal of channel 12, with the resulting loss of revenue having a significant adverse effect upon the economic well-being of Montgomery and its citizens. Other surrounding markets with multiple VHF wide-coverage assignments such as Birmingham, 98 miles north; Mobile, 213 south of us; and Columbus, 85 miles to east of us, would obtain a distinct economic advantage over Montgomery within Montgomery's natural trading area.

We also believe that it should be pointed out that station WSFA-TV, Montgomery, with its VHF channel, has consistently given the people of Montgomery and of the surrounding areas the highest quality of television viewing in all areas of programing.

Montgomery's VHF channel, of course, is important not just to the people of Montgomery and its immediate metropolitan area. Montgomery is the center of a wide and sparsely populated area in central and southern Alabama and there are thousands of people on farms and in rural communities, particularly in Butler, Wilcox, Covington, Monroe, and Lowndes Counties, who now receive their only reliable commercial television service from channel 12 in Montgomery. Over 50,000 persons would stand to lose their only reliable commercial television service and an additional 140,000 persons would be deprived of their second commercial television service if channel 12 were replaced by a UHF assignment. All told, over 350,000 persons in the rural areas would stand to lose the television service from channel 12 which they now enjoy and rely upon for vital news and weather information, and a wide variety of public affairs programing, as well as for entertainment purposes.

We think it may also be of interest to the committee to note briefly the grave and widespread concern of the people who would be affected by the removal of channel 12 from Montgomery, as evidenced by the opposition which has been expressed by the public in the FCC proceedings.

The entire congressional delegation from the State of Alabama has recorded its firm opposition to the deletion of channel 12.

It is opposed by the Honorable John Patterson, as Governor of Alabama and the head of its executive departments.

The Alabama State Legislature, by joint resolution adopted, has vigorously objected to the deletion of channel 12. A copy of this joint resolution is appended.

By formal resolution, the Montgomery City Commission has opposed the removal of channel 12. Similarly, the city councils or city commissions of more than a score of other communities in the areas surrounding Montgomery which would lose the service of channel 12 have formally protested the deletion of the channel.

State agencies charged with the welfare of the citizens of Alabama, such as the Alabama Civil Defense Department, the Alabama Public Service Commission, the Alabama State Planning and Industrial Development Board, the State of Alabama Commission on Alcoholism, and the Central Alabama Rehabilitation Commission, have opposed the deletion of channel 12, expressing concern as to the adverse effects which the removal of channel 12 would have upon their activities and upon the citizens of the State.

Farm and rural organizations, including the Alabama Farm Bureau Federation, have vigorously opposed this action which would deprive thousands of people in rural and farm areas of much-needed television service, in some instances, of their only service.

The Alabama State Chamber of Commerce, the Montgomery Chamber of Commerce, and the chambers of commerce of numerous cities throughout the area have expressed their opposition in view of the adverse effect which the removal of channel 12 would have upon the area's business and industrial development and economic well-being.

Civic, community, and professional organizations throughout the area, such as, in the case of Montgomery, the Montgomery Bar Association, the Montgomery

Lions Club, the Montgomery Kiwanis Club, Men of Montgomery, the Downtown Business Association of Montgomery, the Exchange Clubs of Downtown Montgomery and of East Montgomery, and the Montgomery Civitan Club are opposed.

Educational leaders in our area have indicated their firm opposition to removing channel 12.

Literally hundreds of individual citizens who would lose the service of channel 12 have expressed their concern and opposition in letters and petitions.

We point the above out to give this committee a concept of the overwhelming opposition in Montgomery and the State of Alabama to the removal of the only wide-coverage VHF service from the State capital.

In summary, we believe that the retention of wide-coverage VHF television in Montgomery is essential. We also believe that it is highly desirable to encourage the expansion of UHF television by such steps as assuring that television sets be capable of receiving both VHF and UHF signals. Accordingly, we respectfully urge that H.R. 9267 or similar legislation be favorably reported by this committee and passed by the Congress.

I thank the committee for this opportunity to appear and present these views.

STATE OF ALABAMA, HOUSE OF REPRESENTATIVES

HOUSE JOINT RESOLUTION 91

By Messrs. Goodwyn, Bailey, Peirce, Goldthwaite, Jones (Monroe), Jones Chambers (Covington), McLendon (Bullock), Dickson, Long (Perry), Powell, Faulk, Grouby, Bassett, Thomas, Lee, Barnett, Cornett, Cook, Steagall, McCorquodale, Dunn, Vickers, Torbert, Solomon, Turnham, Rast Oakley, Nettles, Daniel, Grant, Boyd, Owens, Salter, Brooks, Brannan, Nichols, Adams, Gilmer, Hain, McClendon (Chambers), and Reynolds (Chambers).

Whereas the Federal Communications Commission proposes to require all television stations in the Montgomery, Ala., area to operate on the limited coverage UHF (ultrahigh frequency) band and thus eliminate the area's only wide range VHF (very high frequency) station, WSFA–TV, channel 12; and

Whereas channel 12 has a long record of faithful and conscientious service to the people of central and south Alabama, offering viewers a great variety of programs in the public interest—such as news broadcasts, timely interviews, public information shows, and special events—to keep residents of this area continually posted on important news, weather bulletins, and issues of the day, including events occurring at the State capital; and

Whereas the Federal Communications Commission in 1952 acted in behalf of some 250,000 families of this area in allocating a maximum range VHF channel to Montgomery and channel 12 has been on the air since 1954 making good use of this channel allocation and as a "trustee" of this channel protecting the right of central and south Alabama citizens to this VHF television service; and

Whereas some 200,000 homes in this area which presently receive Montgomery-originated television programs stand to lose this service is channel 12 is abolished and a weak signal UHF station substituted, denying all television to many homes and curtailing service in more than 20 Alabama counties; and

Whereas the removal of Montgomery's only VHF station would deprive many thousands of central and south Alabama residents of television service from their State capital—when every other State capital in the United States has high power VHF service—and leave this area to be served by stations at Columbus, Ga., Albany, Ga., Panama City, Fla., Pensacola, Fla., and Meridian, Miss., all stations which are hardly interested in the affairs of state in Alabama; and

Whereas other television stations of this area are also opposed to the recent proposal of the Federal Communications Commission, viewing this action as detrimental to the established Montgomery area market and contrary to the public interest; and

Whereas the Governor of Alabama, Hon. John Patterson, our U.S. Senators, Hon. Lister Hill and Hon. John Sparkman; our Congressmen, and many others have joined in protesting the unwarranted action of the Federal Communications Commission in proposing to eliminate Montgomery's only VHF outlet: Now, therefore, be it

Resolved by house of representatives (the senate concurring), That the legislature formally go on record to deplore the proposed ruling of the Federal Communications Commission, to urge the Commission to reconsider its action, and to strongly recommend that Montgomery remain an outlet for high quality VHF television; be it further

Resolved, That copies of this resolution be forwarded by the clerk of the house to the Chairman of the Federal Communications Commission, Hon. Newton Minow, and to each of the members of the Commission and to the U.S. Senators and each of the Congressmen from the State of Alabama.

Adopted by the house of representatives, August 18, 1961.

Concurred in and adopted by the senate, August 18, 1961.

Approved by the Governor, August 23, 1961.

Mr. JAMES. The other gentlemen are here and would like to be heard also.

The Honorable Leland Enzor.

Mr. ROBERTS. I want to compliment the mayor on his statement. I believe he states the position of the great majority of the people in that area. While his county is not in a district represented by me at the present time, I have counties surrounding it and it may be in my district ultimately. I do not want to see people of about 16 counties of Alabama deprived of coverage which we receive at the present time. While we like the State of Mississippi, we do not want to be dependent on Mississippi or Georgia or any other State for our capital news—not only news, but other civic, cultural, and economic aspects that are now afforded this vast area.

Mr. Chairman, I would like at the conclusion of the mayor's statement to include in the record a statement from the Honorable John Patterson, Governor of the State of Alabama, along with a statement of the entire Alabama delegation, and, attached to this letter from the delegation, also a statement which we filed with the Federal Communications Commission.

The CHAIRMAN. That will be received for the record. We had given prior permission to the Governor to file his statement, but it may be filed at this point.

(The documents referred to are as follows:)

STATEMENT OF HON. JOHN PATTERSON, GOVERNOR OF THE STATE OF ALABAMA

Mr. Chairman, my name is John Patterson, and I am Governor of the State of Alabama. I appreciate your courtesy in allowing me to make a statement in behalf of H.R. 9267, which was introduced by Mr. Roberts of Alabama. In my opinion, this is meritorious legislation, and I wish to urge that the committee give it favorable consideration.

H.R. 9267 has the effect of "freezing" present very high frequency television channel allocations, assuring citizens living in areas now served by these high-power stations of continued television service. Substitution of short-range ultrahigh frequency channels would deny all television service to many thousands of citizens who already have a sizable investment in sets and outside antennas.

Unfortunately, Alabama stands to suffer many ill effects as a result of certain arbitrary changes proposed last summer by the Federal regulatory agency, the Federal Communications Commission. This proposal, which is now pending, would convert Montgomery, the capital city of Alabama, into an all-UHF market, taking away our sole VHF outlet, channel 12. As a direct consequence, some 56,000 persons in south Alabama would be without television service of any kind.

This large area of my State—comprising portions of Crenshaw, Covington, Butler, Conecuh, Monroe, Wilcox, Dallas, and Lowndes Counties—now receives television service over channel 12, Montgomery. If this channel is removed, an additional 142,000 persons would lose one of the two television channels they

now receive. For this fact alone, the FCC's recommended action is completely unjustified.

I wish to vigorously protest any change in television station allocations which will deny service to any large group of persons. When this occurs, I do not think the public interest is being served.

Mr. Roberts' bill, H.R. 9267, would "freeze" all present VHF television station allocations, allowing Montgomery to retain channel 12. I might point out that I believe the State capital is certainly entitled to a maximum range television outlet. The capital is the source of daily happenings affecting all of the people of the State, and television is a medium of mass communications on which citizens have learned to depend for news, announcements, and other items of general interest.

Moreover, I believe that Montgomery—as the State capital, the home of the air university, two colleges, and two airbases, and third largest city in Alabama—is entitled to more than one VHF outlet. It may be that all-UHF assignments are in order in areas of concentrated population which are served by half a dozen or more television stations. However, this is far from the situation in Alabama. In my judgment, the FCC would do well to study the feasibility of assigning additional VHF channels to Montgomery—instead of taking away the only one we have—in order to reach and serve the thousands of persons living outside the Montgomery metropolitan area and also outside the metropolitan area of any other city large enough to support a television station.

I also support H.R. 9267 for another reason, which is important to the entire State. As you may know, Mr. Chairman, Alabama has one of the foremost educational television networks in the United States. It has been cited many times in past years in hearings before your committee. We have made maximum use of VHF channel allocations, and many thousands of schoolchildren take advantage of educational broadcasts every day. In addition, we use educational television very effectively in a farsighted literacy program. There is no doubt of the great value of educational television in our State.

Educational television is now broadcast on channels 2, 7, and 10. At the present time, perhaps three-fourths of our citizens can receive these broadcasts. If our VHF channels were taken away at some future date and low-power UHF channels substituted, this would sabotage our ETV program.

I urge the committee to study carefully and fully the consequences of the FCC's proposal to convert some television markets, including Montgomery, to UHF at this time with the expressed view toward making additional changes to UHF later, and possibly switching every television station in the entire Nation to UHF sometime in the future. This proposal has dangerous aftereffects. In my opinion, it is not in the best interest of the general public.

Mr. Roberts' bill, H.R. 9267, also provides that manufacturers must equip every new television set with all-channel tuning mechanisms. This is a good provision.

I am pleased to present this statement to your committee, Mr. Chairman. I respectfully urge that the committee approve H.R. 9267 and report it favorably to the floor of the House.

Thank you.

U.S. SENATE,
COMMITTEE ON LABOR AND PUBLIC WELFARE,
Washington, D.C., March 6, 1962.

HON. OREN HARRIS,
Chairman, House Interstate and Foreign Commerce Committee,
Washington, D.C.

DEAR MR. CHAIRMAN: With reference to the all-channel legislation you and your committee now have under consideration, we, the members of the Alabama congressional delegation would like to bring to your attention a written expression of our interest in the present television frequency situation and the proposed rulemaking of July 27, 1961, affecting the capital city of our State, Montgomery, Ala., which in part contributed to the proposed legislation now before you.

The written expression was submitted to the Federal Communications Commission on August 18, 1961, and was signed by every member of our Alabama delegation in Congress. We think it related to the question now before you and your members regarding the proposed all-channel television in that we could more enthusiastically endorse and support the proposal before you if it would

help assure the retention of the VHF television channel and service for our people of Montgomery, Ala., and the wide listening area covered by the station now licensed with the VHF channel.

We respectfully request that these expressions and attached copy of our letter of August 18, 1961, to the Federal Communications Commission be made a part of the official record of your proceedings on H.R. 8031.

With kindest regards, we are,

Sincerely,

Lister Hill, U.S. Senator; John Sparkman, U.S. Senator; Frank W. Boykin, Member of Congress; George M. Grant, Member of Congress; George W. Andrews, Member of Congress; George Huddleston, Jr., Member of Congress; Kenneth A. Roberts, Member of Congress; Albert Rains, Member of Congress; Armistead I. Selden, Jr., Member of Congress; Carl Elliott, Member of Congress; Robert E. Jones, Member of Congress.

The CHAIRMAN. Mr. Mayor, let me say to you that whether Mr. Roberts is in your district now or may be in your district later on, you have from your State of Alabama a very fine and active member of this committee in Kenneth Roberts. He is doing a splendid job here for you and has the high regard and respect of the members of this committee and the Members of Congress generally.

He is a real advocate here on this committee for you.

Mr. JAMES. The people of my district are just as proud of Congressman Roberts as the people in his own district.

Mr. ROBERTS. Thank you, Mr. Chairman, and I hope you remain that way right on up through the election.

The CHAIRMAN. Thank you very much.

Judge Enzor, do you have any further comments you would like to make?

Judge ENZOR. If I may, sir. Please, if you will include my statement in the record.

The CHAIRMAN. It will be included.

Judge ENZOR. I would like to digress and just more or less summarize for a moment.

I am not here pleading for any local television station; I am not here pleading for an ABC outlet or an NBC outlet or a CBS.

Gentlemen, I am here asking you for one thing and that is a television station. I come from south central Alabama. Visualize in your mind Mobile in the southwest corner. We are 140 miles. We do not receive anything from Mobile.

To our east is Dothan on the Georgia line, 85 miles, and we do not receive Dothan except on the barest fringe area.

I would not even let my little girl go over there to appear on television, because the two times she went, we could not recognize who she was.

Gentlemen, we are, to the south of us, 80 miles from Pensacola on the Gulf of Mexico. To the north of us, Montgomery, 87 miles, and the only reason we get the Montgomery station, WSFA, is that its transmitting tower is some 25 miles in our direction from the city of Montgomery.

Gentlemen, south central Alabama has just one TV station, just one. And now somebody is trying to take that away from us. Our people were disturbed. It was like a supersonic boom last year when the word permeated throughout our area, that the Government—of course, our people do not know what the Federal Communications

Commission is—the Government was trying to take away our only television signal.

Night before last, the station made a brief news announcement that the speaker who follows me and I were coming to testify before a committee in behalf of keeping WSFA on the air, one simple statement. For 2 hours my phone rang, gentlemen, from all over the city of Andalusia, begging me to get our story across to you that we will be televisionless if you do not save us, because it does not look like the Federal Communications Commission intends to.

They are talking about selective deintermixture—selective. They are selecting us to be without television, gentlemen. They are talking about second-class citizens, one man who preceded me. Are we to be the second-class citizens of this country?

Gentlemen, I know a friend in Florida who owns three busses. He has not appeared before this committee to ask you to cancel the charter of the Greyhound Bus Lines because it is unfair competition. I do not care who makes the money out of television. I just want the one primary source of recreation in south Alabama preserved.

We do not have burlesque shows. We do not have honky-tonk with night club singers and what-have-you. We do not have big league baseball games.

We are in a low per capita income area. We are in the rural area. We think we are in one of the many grass roots areas of this country, and gentlemen, we have a certain right to at least one television facility.

The others are talking in terms of three and four. If this deintermixture proposal goes through, gentlemen, the city of Montgomery will have three UHF stations—they do have, anyhow, or two, plus this VHF station. They already have two, plus the VHF station. We cannot get those signals 87 miles away.

And yet they would deprive us. This is selective deintermixture. Montgomery would have three—Andalusia, Lowndes, Covington County, Crenshaw County, Butler County, Conecuh County, no TV reception.

Gentlemen, thank God that this committee is here to prevent this type of gross miscarriage of justice.

In 1956, I ran for mayor of the city of Andalusia. I went to the radio station. I made speech after speech. I was butting my head against a stone wall until it dawned on me that every person in Andalusia with a TV set had it on and had it on station WSFA. I went to Montgomery and spent my money and I won that election over the incumbent.

In 1958, I ran for probate judge. I immediately went to the WSFA station, 87 miles away, gentlemen, and covered every TV set in my county.

They do not have an opportunity to watch anyhting else.

You are the court of last resort, gentlemen. Through the years, you have protected us from the Chief Executive, from the Supreme Court; you have protected us from the private interests who would not look at the public interest, and today, gentlemen, protect us from this administrative agency that would deprive us of our only chance at television in south Alabama.

They say their ultimate goal is to remove all VHF stations. If they do, I doubt if there is a State in the Union that would not have

a vast rural area with no television. They say it is selective deintermixture. Then they are grossly discriminating against eight of us areas in the country. I presume the other seven are like we are—to give us no television whatsoever; that is selective, gentlemen.

I appeal to you to stop this by passing the Roberts bill 9267, or a similar bill.

The CHAIRMAN. Judge, thank you very much for the breath of fresh air.

Mr. Roberts?

Mr. ROBERTS. Thank you, Judge.

I certainly want to compliment you on your statement and I appreciate the wonderful confidence you have in this committee.

I want to tell you, like the great French marshal said about the Germans at Verdun, something which means they shall not pass.

I am just going to be like Leonidas at the Pass. I am going to see that you get fair time.

I appreciate your statement.

The CHAIRMAN. Mr. Younger?

Mr. YOUNGER. Just one question.

I did not quite get the significance of why you people thought your Governor was taking the station.

Judge ENZOR. In other words, in south Alabama, the Government is any agency.

Mr. YOUNGER. I thought you said the Governor.

The CHAIRMAN. I think if you will read the Governor's statement, you will find a different line of argument.

Judge ENZOR. May I tell you one little human interest story and then I will quit?

On the way from Andalusia to Montgomery to catch a plane—we have to go 87 miles to catch a plane to anywhere. I came through Crenshaw County. A big dog ran across the road and I swerved, foolishly, to miss that dog and ended up in a ditch with a busted tire.

A group of farmers standing there in their overalls came over to see if I got hurt. One of them said if I had time he would go over and get his tractor to pull me out. I told them I had to meet a deadline to catch a plane to Washington.

I knew what that sounded like to them, so I hastened to explain that I was coming to Washington to testify in behalf of keeping WSFA on the air. Immediately, the whole complexion changed. They said we have been reading about it; we have been hearing about it; we will be ruined if they do that. One farmer stopped a pickup truck, another one ran over to his house to get a chain, and they pulled me out of the ditch. They fixed my tire, and the man whose dog I killed tried to pay the truckdriver. [Laughter.]

The CHAIRMAN. Thank you very much.

(The complete statement of Hon. Leland Enzor is as follows:)

STATEMENT OF JUDGE LELAND ENZOR

Mr. Chairman and members of the committee, my name is Leland Enzor. I am the probate judge of Covington County, Ala. Covington County is located in south central Alabama, bordering on the Alabama-Florida State line. The county seat, Andalusia, is approximately 73 airline miles due south of Montgomery, Ala.

I should like to submit my views to the committee in support of the legislation proposed by Congressman Kenneth Roberts of Alabama in H.R. 9267,

which would stop the Federal Communications Commission from removing VHF assignments for the purpose of effecting UHF deintermixture, but would authorize the FCC to require television sets shipped in interstate commerce to be capable of receiving both VHF and UHF signals.

The people of Covington and surrounding counties have one basic television service—WSFA–TV, channel 12, Montgomery. Some of us get some choice of television programing from fringe service from channel 4 in Dothan, Ala.

In the last 6 months practicaly all the citizens of our county, and I might add—the citizens of all south Alabama, have been disturbed by a Federal Communications Commission proposal which would remove channel 12 from Montgomery. The net result of this proposal, should it be implemented, would by that Covington County people in Andalusia and all areas east of Andalusia would lose their principal television service and any choice of services—the people in the northern part of the county would no longer have any television at all.

The removal of channel 12 from Montgomery would have a most disastrous effect on television viewing in our area. Even where people have long had a choice of television programs, they have preferred to watch channel 12, WSFA–TV, a great portion of the time. This is not unusual, because this station has always seemed like a hometown station, although the studios are located 90 miles away. No news event in Covington County will go unreported on channel 12. Many of the county's citizens have appeared on the station from time to time. Only last summer, the station brought its remote unit and program personnel directly to our town square to video-tape an hour long program saluting our town.

I realize what I am saying may not be unusual for many stations in America; but what I do want you to understand is that WSFA–TV stands in very high regard by all the citizens of Covington County, Ala. and south Alabama.

When we heard the news last year that the FCC planned to remove channel 12 from Montgomery and replace it with a UHF frequency, we almost went up in arms.

Why had the FCC singled out channel 12—WSFA–TV—Montgomery—south Alabama—Covington County—for an experiment which is foredoomed to failure? I say "failure" because evidently the Commissioners' goal was to create good from something that is allegedly bad. If the television situation in south Alabama is bad, according to FCC standards, then their proposal will only result in something that is worse.

On the other hand, I think I speak for all the people in my area when I say that the television situation in our area is far from bad. Of course, many of our citizens do not have a choice of programs, and all the rest of us only have one other choice. We do not seek your sympathies, because channel 12 has accepted the tremendous responsibility of offering as a well-balanced program diet.

Although our selections are few, the quality has been extremely good. WSFA–TV maintains excellent technical productions—the picture and sound are good and clear—the news is comprehensive and the contents are good—all other programs are of the highest quality. Our farmers get complete and accurate weather forecasts three times daily. We do not get this weather information anywhere else. Montgomery is where south Alabama weather information is collected and evaluated.

Many of the citizens in my area have filed written comments with the FCC. I wish I could read them all to you. But it comes down to the point that we need this service, we want this service and please let it alone. WSFA–TV should be permitted to continue to serve the people of this city and this area with its fine programs, including newscasts and featured articles covering government, political, cultural, and other matters which transpire at the capital and which are of greatest concern and importance and interest to our people and all Alabamians.

As a resident of Alabama, I have tired to tell you how we feel about channel 12—and I hope I have given you reasons why we have a real warm spot in our hearts for this station. You might wonder at this point why I dwell on this subject.

The reason is simple—the substitution of a UHF frequency for channel 12 will, in effect, deprive us of reception from WSFA–TV and from the city of Montgomery. Some of our residents have tried in vain to receive a signal from the present UHF station. A few of us originally bought UHF sets, put up high antennas, but none of this produced anything resembling a television picture. This only convinces us that another UHF station in Montgomery could offer no better service.

And I want to emphasize this point. There is no town in this area that, in the foreseeable future, can support a television station to replace the service that would be lost if channel 12 were chopped down to UHF coverage. Andalusia is the biggest community in this area and we have just over 10,000 people.

I know I speak for all the people in my area when I take a stand unequivocally opposed to the removal of channel 12 from Montgomery.

And I understand that this committee is pledged to investigate this ill-advised plan—and to recommend an alternate plan. I have studied Mr. Kenneth Roberts' bill which would protect present VHF assignments and additionally require TV set manufacturers to make all-channel sets.

I will not be so naive as to tell you that I firmly believe this legislation will have an immediate good effect on television as it pertains to Covington County. But I do believe that over a period of years it will help, as it will tend to put UHF sets in the areas which can support additional television stations, and where there are no more available VHF frequencies.

I would suggest that Congress or the FCC go on record at the earliest possible moment as being opposed to any move which would remove long-range VHF's from cities which have a responsibility to serve wide rural areas such as central and south Alabama.

The people in Covington County and south central Alabama are not directly concerned with whether or not the people up in the city of Montgomery have three television stations or three equally competitive or balanced television stations. But we are vitally concerned about losing the only television service available to many of us and the television station that our people most want. It may be that the people in these administrative bureaus get so wound up in their slide rules and moving circles that they forget about the people. But I believe that you gentlemen in Congress understand the problems of the people who stand to lose their only television service in this thing. Therefore, I earnestly plead with you—in fact, beg you—to do something to protect VHF television service for people in rural areas and smaller communities and keep our channel 12.

I appreciate the opportunity to appear before your committee and submit my views on this legislation.

The CHAIRMAN. Mr. Turner, do you have any further human interest stories?

Mr. TURNER. Mr. Chairman, I am not a politician, and I am not a broadcaster. I am just a citizen, therefore not as colorful as my predecessor here has been.

But I would like to read a portion of my statement if I may, for this committee and I would like to request that my entire statement go into the record.

The CHAIRMAN. It will be included in the record at this point.

(The complete prepared statement of Charles G. Turner, Jr., is as follows:)

STATEMENT OF CHARLES C. TURNER, JR., EXECUTIVE SECRETARY AND DEAN OF STUDENTS, HUNTINGDON COLLEGE, MONTGOMERY, ALA.

Mr. Chairman and members of the committee, I do not come before this committee as an authority on television problems nor did I wait for the officials of channel 12 in Montgomery to request my services. I am a layman in television matters, but one who is keenly interested in this issue. Because of this interest I volunteered my services some time ago for any assistance I might be able to render. I am here today, therefore, to testify in behalf of the bill by Congressman Kenneth Roberts which would among other things stop the Federal Communications Commission from removing very vital VHF frequencies from Montgomery, Ala., and other cities.

My affiliation with Huntingdon College has enabled me to understand more fully than the average citizen the service and impact which channel 12 has had upon our people in central Alabama and I am here to testify to what I have seen and to the feelings which I have in the matter.

We at Huntingdon, along with thousands of Alabama citizens were shocked last fall to learn that the Federal Communications Commission had proposed to remove central Alabama's only VHF channel and replace it with a UHF fre-

quency. For 7 years we have looked to channel 12 to provide us with effective communications with the people of central and south Alabama. WSFA–TV accepted this responsibility to the fullest. The station has been like a very personal friend of Huntingdon College and countless other organizations and institutions of the finest type which have influence among our people. Naturally we were concerned about the welfare of the station and its employees. After the initial shock we began to realize that our concern was not so much the station or the people who work there—after all, investors run the risk of losing money and the station employees are all qualified to get jobs elsewhere.

We did realize, however that Montgomery and south Alabama would be the losers. Montgomery would lose its only means to communicate effectively with all of the people in its natural trade area. The people of south Alabama would lose in many cases their only source, and in other cases their only choice, of television service. In all cases, the people in more than 30 counties would lose their only television contact with their capital city.

WSFA–TV has been of immense service and benefit to Huntingdon College ever since the station began operation. It has been a reliable medium of contact for us with the general pubilc and and with thousands of alumni who live in the viewing area. The management has readily made time and facilities available to us whenever we ask for it. For 3 years they provided us with time and technical assistance for scheduled weekly shows. They made no charge for any of their services but, had they done so, the cost would have been completely prohibitive to us.

Such a spirit of public service is hard to come by in this modern day. The practice of such a spirit is characteristic of the management and personnel at WSFA–TV and as a result the station has identified itself with the finest institutions and people in the State of Alabama.

This brings me to perhaps the most critical point of my argument. Alabama has in WSFA–TV a television facility which through its dedication to quality and service stands head and shoulders above any other enterprise of its kind in our area. Because of their viewpoint and financial ability they are capable of rendering public service far beyond the call of duty. This is characteristic especially through newscasts covering Alabama's capital city, national affairs in Washington, and other news events from around the world. The same spirit is shown in weather coverage where they have maintained their own qualified experts in the field and have kept our area advised on weather conditions including instant coverage on storm warnings. To an agricultural economy this can frequently be the difference between financial success and financial ruin for a people. Further, because of the way they do business they have originated countless shows locally far superior in quality to anything found normally on local channels.

The word here is quality. This quality of personnel, of service, and of production is a feature which we cherish for the people of central and south Alabama. All of us know that one of the dangers inherent in socialism and communism is that all rank, all excellence, all order, all values as we have known these things for thousands of years will be leveled to one common plane. In my opinion, if the Federal Communications Commission's order is allowed to stand this will be the precise effect so far as television is concerned in our part of the country.

Other channels are good and are doing the best they can within the limitations of their range of coverage and their budgets. The Federal Communications Commission with its order is in effect saying to channel 12, and subsequently to all other VHF channels, "Your overall quality and outstanding service must be sacrificed in order to put all TV stations on one common competing level." If this were really logical, it would not be challenged by me. But whenever quality in education, art, music, television or in any other area must be sacrificed, we face a tragedy.

Also, if this sacrifice in the case of channel 12 would really strengthen the position of UHF channels in our area it might be defended. I have inquired at this point and understand that such a move will not help UHF channels but would, indeed, likely hinder them as well.

I have watched television grow in Alabama in these recent years. Channel 12 has done an excellent job of creating a good image for Montgomery. I have seen the three VHF educational television stations, in which Alabama was the pioneer State, grow strong and create educational opportunities for many people. Through all of these efforts people who know something about television are exerting every effort to use it to the fullest advantage for the benefit of as many

people as possible. In the face of these pioneering efforts in Alabama, it is ironic that the Federal Communications Commission should select Alabama as one of its experimental areas for its deintermixture order.

We know that VHF allocations have run out and there is little possibility of increasing the number of these stations without a corresponding relaxation of engineering standards which would be detrimental to the public interest. Therefore, I come before you asking that you seek a solution to the television allocation problem. If we need more stations, please do not get them at the expense of removing any or all of the fine, high-quality VHF signals now in use.

I have reviewed Congressman Kenneth Roberts' bill which would preserve present VHF stations and give the Federal Communications Commission authority to require manufacturers to make all-channel sets. The present VHF stations, including channel 12, would continue to serve the rural areas in Alabama and in other States. The presence of all-channel sets in great numbers would give investors an incentive to fill the void in metropolitan areas.

I cannot argue that UHF investors would have equal opportunities with VHF investors. But I do say, and none can deny me, that competing trade centers will find themselves in unequal positions if one town has all VHF and another has all UHF. It appears to me far better to have unequal facilities within a city than to have unequal facilities between cities.

In conclusion, let me say that I feel very strongly, as do most of the people in central and south Alabama, that the Federal Communications Commission is perpetrating a gross injustice against the people in our area. You are in a position to make a correction at this critical time. All-channel legislation, coupled with preservation of our existing high quality VHF television service, appears to me to be the wisest course available.

I thank you for the opportunity to appear and present my views to the committee.

Mr. TURNER. I will confine myself to only one segment of my statement, which has to do with a principle which I think is basic and needs to be underscored and your committee will come to that principle before you reach a decision on this question.

Alabama has in WSFA–TV a television facility, through its dedication to quality and service, stands head and shoulders above any other enterprise of its kind in our area.

Because of their viewpoint and financial ability, they are capable of rendering public service far beyond the call of duty. This is characterized especially through newscast covering Alabama's capital city, national affairs in Washington, and other news events from around the world.

The same spirit is shown in weather coverage, where they have maintained their own qualified experts in the field and have kept our area advised on weather conditions, including insurance coverage on storm warnings.

To an agricultural economy, this can be frequently the difference between financial success and financial ruin for a people.

Further, because of the way they do business, they have originated countless shows locally far superior in quality to anything found normally on local channels.

The word here is quality. This quality of personnel, of service and of production is a feature we cherish for the people of central and south Alabama.

All of us know that one of the dangers inherent in socialism and communism is that all rank, all excellence, all order, all values as we have known these things for thousands of years will be leveled to one common plane.

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In my opinion, if the Federal Communications Commission order is allowed to stand, this will be the precise effect so far as television is concerned in our part of the country.

Other channels are good and are doing the best they can within the limitations of their range of coverage and their budget.

The Federal Communications Commission, with its order, is in effect saying to channel 12, and subsequently to all other VHF channels, "Your overall quality and outstanding service must be sacrificed in order to put all TV stations on one common competing level."

If this were really logical, it would not be challenged by me. But whenever quality in education, art, music, television, or in any other area must be sacrificed, we face a tragedy.

It is this principle which I would like to underscore for the committee.

The CHAIRMAN. Thank you for a very fine statement.

Mr. Roberts?

Mr. ROBERTS. Thank you, Dean, for your very fine statement.

Mr. CHAIRMAN. We have another group from South Carolina who also have a deadline.

First, the attorney general of the State of South Carolina, the Honorable Daniel R. McLeod.

STATEMENT OF HON. DANIEL R. McLEOD, ATTORNEY GENERAL OF THE STATE OF SOUTH CAROLINA

Mr. McLEOD. Mr. Chairman and gentlemen of the committee, if I may, I will pass up for inclusion in the record the prepared statement which I have and will make my remarks extemporaneously and will briefly attempt to summarize the contents of the written statement which I will submit.

The CHAIRMAN. You may put your statement in the record at this point.

(The complete prepared statement of Daniel R. McLeod is as follows:)

STATEMENT OF HON. DANIEL R. McLEOD, ATTORNEY GENERAL OF THE STATE OF SOUTH CAROLINA

Mr. Chairman and members of the committee, my name is Daniel R. McLeod. I am attorney general of the State of South Carolina, and appear before you today as a representative of the people of South Carolina at the direction of the Honorable Ernest F. Hollings, Governor.

I will direct my remarks to H.R. 9267 and its companion bills whose provisions are of paramount importance to the people of my State since they would guarantee the continued allocation of a VHF television facility to Columbia, our capital and largest metropolitan city.

Under a plan known as deintermixture, the Federal Communications Commission has proposed the elimination of VHF channel 10 in Columbia. I can say with all sincerity that the people of my State are universally opposed to such a plan. They believe in the development of the UHF, but not at the expense of the existing VHF.

Recently Governor Hollings and more than 90 other leading South Carolina governmental, political, agricultural, educational, religious, charitable, profes-

sional and business officials, and organizations petitioned the FCC asking for dismissal of their deintermixture proposal as it affects Columbia. The following is a list of signatories to that petition, and is submitted here as testimony to the public interest factors involved in the favorable consideration of H.R. 9267:

Before the Federal Communications Commission, Washington, D.C.

Docket No. 14245

IN THE MATTER OF DEINTERMIXTURE OF COLUMBIA, S.C.

PETITION FOR HEARING AND RECONSIDERATION AND REQUEST FOR ORAL ARGUMENT BY—

Ernest F. Hollings, Governor of South Carolina.
Olin D. Johnston, U.S. Senator, South Carolina.
Strom Thurmond, U.S. Senator, South Carolina.
L. Mendel Rivers, U.S. Representative, First District, South Carolina.
John J. Riley, U.S. Representative, Second District, South Carolina.
W. J. Bryan Dorn, U.S. Representative, Third District, South Carolina.
Robert T. Ashmore, U.S. Representative, Fourth District, South Carolina.
Robert W. Hemphill, U.S. Representative, Fifth District, South Carolina.
John L. McMillan, U.S. Representative, Sixth District, South Carolina.
Edgar A. Brown, president pro tempore and dean of the South Carolina Senate and Democratic National Committeeman from South Carolina.
E. P. Riley, Chairman, Democratic Party of South Carolina.
Robert F. Chapman, State chairman, South Carolina Republican Party.
Burnet R. Maybank, Lieutenant Governor, State of South Carolina.
Daniel R. McLeod, attorney general, State of South Carolina.
Jeff B. Bates, treasurer, State of South Carolina.
O. Frank Thornton, secretary of State, State of South Carolina.
E. C. Rhodes, comptroller general, State of South Carolina.
William L. Harrelson, commissioner of agriculture, State of South Carolina.
Jesse T. Anderson, State superintendent of education.
Tax Commission, South Carolina:
O. W. Livingston, chairman.
Robert C. Wasson, commissioner.
James H. Sullivan, commissioner.
J. A. Calhoun, Jr., commissioner.
Harold Murph, commissioner.
Frank D. Pinckney, major general, South Carolina National Guard, the adjutant general of South Carolina.
S. N. Pearson, chief highway commissioner, South Carolina State Highway Department.
South Carolina Public Service Commission, C. A. Rice, acting chairman.
Charles B. Culbertson, director, South Carolina Civil Defense Agency.
South Carolina Department of Labor, William Fred Ponder, Commissioner of Labor.
Rufus R. Clarke, president, the Federal Land Bank of Columbia.
R. A. Darr, president, Federal Intermediate Credit Bank of Columbia.
Robert H. McDougall, president, Columbia Bank for Cooperatives.
P. M. Coble, executive secretary, South Carolina Educational Association.
South Carolina Farm Bureau Federation, E. W. Brooks, executive vice president.
South Carolina Development Board, Walter W. Harper, director.
South Carolina State Chamber of Commerce, Howard L. Burns, president.
Robert L. Sumwalt, president, University of South Carolina.
R. C. Edwards, president, Clemson College.
Very Rev. Msgr. Joseph L. Bernardin, chancellor of the diocese of Charleston (for the Roman Catholic Church of South Carolina).
Columbia Ministers' Association, Neal Wyndham, president.
Richland County (population 200,102):
Walter J. Bristow, Jr., senator.

C. Heyward Belser, representative.
Martha Thomas Fitzgerald, representative.
Edmund G. Grant, representative.
E. Crosby Lewis, representative.
G. Raymond McElveen, representative.
E. Ellison Walker, representative.
Albert W. Watson, representative.
Lexington County (population 60,726) :
Francis C. Jones, senator.
Albert J. Dooley, representative.
Ryan C. Shealy, representative.
Floyd D. Spence, representative.
Kershaw County (population 33,585) by legislative delegation :
John C. West, senator, chairman.
Donald H. Holland, representative.
Calhoun County (population 12,256) : L. Marion Gressette, senator.
Sumter County (population 74,941) :
Henry B. Richardson, senator.
R. J. Aycock, Sr., representative.
C. W. Goodman, Sr., representative.
John D. Lee, Jr., representative.
Fairfield County (population 20,713) :
Ben F. Hornsby, senator.
Purvis W. Collins, representative.
Lee County (population 21,832) : Ed B. Baskin, senator.
Marlboro County (population 28,529) : W. C. Goldberg, senator.
Orangeburg County (population 68,559) : Marshall B. Williams, senator.
Allendale County (population 11,362) : Robert E. McNair, representative.
Bamberg County (population 16,274) : Claude E. McCain, representative.
Darlington County (population 52,928) : James P. Mozingo III, senator.
Newberry County (population 29,416) :
J. F. Hawkins, senator.
Steve C. Griffith, Jr., representative.
D. J. Folk II, representative.
City of Columbia : Lester L. Bates, mayor.
Greater Columbia Chamber of Commerce : Robert S. Davis, president.
Better Business Bureau of Greater Columbia : Charles E. Stork, president.
J. Bratton Davis, secretary, Richland County Democratic Party.
C. Tucker Weston, M.D., chairman, Richland County Republican Party.
Charles E. Boineau, Jr., Republican Party, member house of representatives, Richland County.
City of Florence, S.C. : R. Powell Black, city manager.
City of Orangeburg, S.C. : S. Clyde Fair, mayor.
City of Sumter, S.C. : Clifton G. Brown, mayor.
City of Hartsville, S.C. : T. L. Maxwell, mayor.
City of Darlington, S.C. : John Jay Ward, mayor.
City of Lake City, S.C. : R. R. Whitlock, city attorney.
Town of Bishopville, S.C. : W. G. Deschamps, mayor.
Lexington Chamber of Commerce : Rountree Sessions, president.
Orangeburg Chamber of Commerce : W. W. Kirkpatrick, manager.
Sumter Chamber of Commerce : J. Clint Brogden, Jr., president.
Newberry County Development Board : Benjamin P. Robinson, executive director.
Newberry County Farm Bureau : Wilbur L. Epting, president.
Darlington Chamber of Commerce : George W. Dargan, president.
Hartsville Chamber of Commerce : Robert G. Clawson, president.
Lake City Chamber of Commerce : James Vernon Epps, president.
Bishopville Chamber of Commerce : W. J. Ray Alexander, Jr., president.
Greater Florence Chamber of Commerce : R. Irving Blanchard, Jr., executive manager.
Lancaster Chamber of Commerce : David F. McInnis, manager.
Camden and Kershaw Chamber of Commerce : Edward M. Royall, president.

Most of these parties also filed individual comments with the FCC opposing the deletion of channel 10. In addition to this group, others who filed comments in FCC docket 14245 in opposition to deintermixture include:

South Carolina Broadcasters Association.
South Carolina Association of School Boards.
South Carolina Boy Scout Council.
South Carolina Eye Bank.
South Carolina Aeronautics Commission.
South Carolina Federation of Women's Clubs.
University of South Carolina Student Senate.
South Carolina NAACP.
Columbia TV and Electronics Dealers.
American Legion Post No. 6.
Columbia Junior Chamber of Commerce.
Sumter County Farm Bureau.
Black River Electric Co-op.
City of Pinewood.
Holly Hill Lions Club.
First Baptist Church, Orangeburg, S.C.
Board of Trustees, Orangeburg School District.
Students of Newberry College.
Prosperity Town Council.
City of Bennettsville.
Clio Woman's Club.
Mullins Chamber of Commerce.
Marion City Council.
Cayce-West Columbia Chamber of Commerce.
Batesburg-Leesville School System.
Batesburg Town Council.
Hollow Creek Community.
Bishopville Kiwanis Club.
Lancaster City Council.
Town of Ninety-six.
Greenwood County Delegation.
Fairfield County Farm Bureau.
Darlington County School System.
Darlington County Commission.
Clarendon County Chamber of Commerce.
City of Cheraw.
Town Council of Chesterfield.
Chester Jaycees.
St. Matthews School Board.
Barnwell City Council, and many, many others.

The integrity of these men, and the thousands of individual citizens in our State who are both alarmed and concerned over Columbia's proposed deintermixture, cannot be impugned.

Opposition to the elimination of channel 10, which is licensed to WIS–TV, has arisen out of the public's need and desire for continued television service from Columbia—and practical understanding of the limitations of UHF to provide that service to wide areas of our State.

Eight years of experience have shown the people of South Carolina that outside of a 20- to 30-mile radius from Columbia, UHF cannot be relied upon for television fare. On the other hand, our citizens are served by VHF from Columbia at distances up to, and exceeding, 80 miles.

Illustrating the difference in VHF and UHF coverage, the latest reports of A. C. Nielsen Co., one of the principal rating services, credits WIS–TV with more than 222,000 television homes and the Columbia UHF stations with approximately 35,000 television homes. Further we understand that engineering studies show that the maximum potential for UHF in Columbia is approximately 50,000 television homes. Thus, the FCC deintermixture proposal would mean that less than one-fourth as many South Carolinians could receive * * * coverage of our legislature * * * University of South Carolina extension courses * * * news of the Governor's office.

Furthermore, Columbia and central South Carolina are not an island that can be isolated by UHF deintermixture. There are a multitude of VHF services available to the people of South Carolina both from within and without the State. At the present time a total of 13 different VHF facilities serve WIS–TV's VHF coverage area, and 5 provide services to all but a small portion of the Columbia UHF coverage area.

Deintermixture of Columbia will not force South Carolinians to Columbia's UHF stations. Quite to the contrary, it will force them to VHF stations, and unfortunately to VHF stations in areas other than South Carolina's capital city and seat of leadership.

The protection of our VHF allocation in Columbia is, therefore, a necessity to the people of our State and the continuance of our entire communications system.

Columbia, in addition to being South Carolina's capital, is the center of our educational system, the hub of our transportation system, the focal point of agricultural and industrial development and the distribution point for our news and information. If we are to see South Carolina grow and prosper at the side of our neighboring States, we cannot afford to be handicapped by limited television facilities in our capital.

No discussion of the public interest factors which control this issue in South Carolina, however, would be complete without mentioning the station that would be directly affected by this proposal.

In WIS–TV South Carolina has a station of which it can be justly proud. It has made continuous efforts over the past 8 years to improve its services to the people and provide for their complete programing and informational needs. The people of South Carolina look to WIS–TV for superior coverage of news events because it has demonstrated its ability to inform in a factual, fair, and comprehensive manner. In short, WIS–TV on VHF has become part of our way of life—we respect it, we look to it, and we need it.

The provisions of H.R. 9267 and its companion bills would guarantee that WIS–TV on VHF channel 10 in Columbia will not be taken from the people who depend upon it. In addition H.R. 9267 would provide a climate in which UHF can grow and develop as a companion to VHF.

Television receiver legislation is in the public interest providing it will assure that sets are capable of receiving the 12 VHF and the 70 UHF channels—and its purpose is to bring about a greater potential UHF audience without infringing upon present VHF service.

In conclusion, I would like to reiterate the position of the Governor and the people of South Carolina in regard to H.R. 9267 and its companion bills * * * we support them vigorously in principle and practice. They provide a solution to the problem of a fair, efficient, and equitable distribution of television allocations in South Carolina and the Nation—in addition to allowing for the further development of UHF.

We oppose deintermixture, for it is doomed to failure in South Carolina and will force our citizens away from their capital and main metropolitan area for their television service.

Since this issue is of such great importance to us, I have attached as addenda a copy of the resolution which was unanimously passed by the South Carolina General Assembly and a copy of the State's formal comments on the proposed deintermixture of Columbia.

I am deeply grateful for this opportunity which the committee has afforded me to express the views of the Governor and the people of South Carolina on this vital legislation. Thank you.

JOURNAL NO. 6 OF THE HOUSE OF REPRESENTATIVES OF THE STATE OF SOUTH CAROLINA

(Regular Session Beginning Tuesday, Jan. 9, 1962)

WEDNESDAY, JANUARY 17, 1962

CONCURRENT RESOLUTIONS

The senate sent to this house the following:

S. 457.—Senator West, Bristow, Hornsby, Baskin, Marshall B. Williams, Richardson, and Jones: A concurrent resolution urging the Federal Communications Commission not to cancel the license and franchise held by WIS–TV, Columbia, S.C., for television transmission over VHF channel 10.

Whereas the Federal Communications Commission is proposing the removal of the only wide-range television facility granted to our State capital, namely channel 10 licensed to WIS–TV at Columbia, S.C.; and

Whereas other cities about us, including Augusta, Ga.; Charlotte, N.C.; and the South Carolina cities of Charleston, Florence, Greenville, and Spartanburg, all have, and will retain, one or more VHF television stations each; and

Whereas citizens of South Carolina beyond the immediate environs of Columbia are equipped to receive only VHF television transmissions; and

Whereas to delete channel 10 would impose a financial outlay of from $30 to $50, or more, upon each such home before it could receive television programs from Columbia; and

Whereas we evaluate with highest commendation the performance of WIS–TV, channel 10, particularly for its alert, fair, and comprehensive news coverage of the affairs of our State government, its initiative in bringing thought-provoking discussion to enlighten our citizens on the problems of our State; and

Whereas there is urgent and compelling public need for the continuation of this praiseworthy performance by WIS–TV and its highly trained personnel; and

Whereas Columbia, our capital and largest city, would suffer irreparable harm through being deprived of communications with vast numbers of persons residing within its normal trade area; and

Whereas many citizens of South Carolina, whose allegiance, loyalty, and civic pride naturally flow to Columbia, will be compelled to form an unnatural devotion to out-of-State television stations to learn of news and events which affect Columbia and their own communities: Now, therefore, be it

Resolved by the senate (the house of representatives concurring), That the General Assembly of the State of South Carolina does hereby voice to the President of the United States, to the U.S. Congress, and to the Federal Communications Commission its objection to the proposed removal of VHF channel 10, and does most urgently ask in the name of fairness to our State, in light of the dominant interest and convenience of our citizens, and in furtherance of good government, that VHF channel 10 be retained in Columbia, S.C., to the end that our capital and largest city, and the people surrounding Columbia, will enjoy television service comparable with other cities of its size and importance; and be it further

Resolved, That a copy of this resolution be forwarded to the two U.S. Senators from South Carolina, each Member of the House of Representatives from this State, to the President of the United States, and to the Chairman of the Federal Communications Commission.

The concurrent resolution was agreed to and ordered returned to the senate with concurrence.

Before the Federal Communications Commission, Washington, D.C.

Docket No. 14245

IN THE MATTER OF DEINTERMIXTURE OF COLUMBIA, S.C.

COMMENTS IN OPPOSITION TO PROPOSED DEINTERMIXTURE OF COLUMBIA, S.C., BY THE STATE OF SOUTH CAROLINA

These comments in opposition to the proposed deintermixture of Columbia, S.C., are filed by the attorney general of South Carolina representing the State of South Carolina and the office of the attorney general. An original and 14 copies of these remarks are being submitted for enclosure in the above mentioned docket.

Wide-range, VHF television emanating from Columbia, the capital of South Carolina, is an essential source of information to the people of this State

1. Columbia is both the political and governmental capital of South Carolina and, as such, houses the offices of the Governor, Lieutenant Governor, the State senate, the state house of representatives, and all, save two, of the State's main commissions and agencies. To have a well-informed electorate, the people must have immediate and accurate knowledge of the daily activities and actions of these many offices; and wide-range VHF television emanating from Columbia on channel 10 (WIS–TV) is one of the most effective means by which this knowledge can be obtained. Any reduction in the service area of the VHF television station in Columbia, however slight, therefore would deprive certain sections of the population of this State of information and news about their government and its actions. Certainly, such a reduction would not be termed "in the public interest."

2. Columbia is, however, more than a political and governmental capital to the people of South Carolina. It is an educational capital with the University of South Carolina and five other colleges located within its metropolitan boundaries. It is an industrial and commercial capital. It is a cultural and religious focal point, and it is South Carolina's agricultural marketplace. Any reduction in present communication facilities which serve wide sections of the State from Columbia would therefore be detrimental to the people of South Carolina.

3. That Columbia is the focal point of public attention in this State is further attested to by the fact that both the Associated Press and he United Press International have their only full-time South Carolina news bureaus located here. Furthermore, the Columbia State newspaper has distribution in almost all of the counties within the State. Columbia, therefore, has developed through the years into the news center of South Carolina ; and the wide-range VHF television facility which presently serves the people in the central and northeastern sections of the State from Columbia (WIS–TV) is a vital part of this communications system.

WIS television has provided the people of South Carolina with superior news and program services

4. Realizing the importance of Columbia, WIS–TV has developed its news program endeavors to meet the needs of both the rural and urban citizens in central and northeastern South Carolina. WIS–TV presently has a news staff that is known for its factual reporting and understanding of events that are of interest to all sections of its audience. The WIS–TV program schedule reflects the understanding the station has for the people who are our citizens. Certainly, to take this service away cannot be in the best interests of South Carolina.

5. The Communications Act (47 USCA 307b) guarantees that the several States and communities shall have a "fair, efficient, and equitable distribution of radio (TV) facilities." South Carolina is surrounded by VHF television facilities in other States that not only serve the area that is presently served by the VHF station in Columbia, but that complete with the VHF station in Columbia. The deintermixture of Columbia would therefore turn those South Carolinians who were not equipped for UHF reception away from Columbia to another State for their television service. Such a loss in communications with Columbia would prove to be a detriment to not only central and northeastern South Carolina, but to the entire State. Since VHF is clearly superior to UHF for reaching and serving the needs of the people of central South Carolina, this clear congressional mandate requires that channel 10 be retained in Columbia.

Deintermixture would downgrade South Carolina

6. The deintermixture proposal of the Commission would downgrade Columbia's importance and affect its overall growth and development. Wide-range VHF television has helped the central area grow and has helped make Columbia the capital that it is today. If VHF television were taken away from Columbia, and South Carolinians began to look elsewhere for their television service, Columbia would suffer irreparable harm. The Commission's proposal therefore cannot be regarded as merely a threat to television service in South Carolina. Quite to the contrary, it must be regarded as a proposal which would lead to the ultimate downgrading of Columbia as an educational, agricultural, business, and cultural center. We cannot believe that the Commission has considered this aspect and the long-range effects of deintermixture in this light.

The need is for more, not less, VHF service in central South Carolina

7. Deintermixture of Columbia would completely eliminate the second television service available to people in the northeastern section of this State. If the Commission is concerned with expanding television service to the people of this country, then we cannot see the logic in eliminating the second TV service to one whole section of our State. The need in South Carolina's central and northeastern sections is for more, not less, VHF television. What the people need is additional VHF service emanating from Columbia.

The people of South Carolina are not generally equipped for UHF television

8. The majority of the people of South Carolina are not equipped with television receivers that can use the UHF signals. In fact, outside of the Columbia metropolitan area there are few homes that have the facilities to view the UHF stations that presently operate in Columbia. The reason for the lack of UHF sets in South Carolina is evident and well known to most of our citizens. First, the areas immediately surrounding Columbia do not need UHF because they receive a variety of VHF stations from both Georgia and North Carolina in addition to those in South Carolina. Second, those people who are served by only two stations in the northeastern section of the State have found that they live too far from Columbia to view the UHF signals at all.

Deintermixture violates the public interest in South Carolina

9. As has been evidenced by the filing of comments with the Commission, the people of South Carolina are unalterably opposed to deintermixture in Columbia. Within the last month the South Carolina General Assembly unanimously passed a concurrent resolution which voiced its opposition to the Commission's proposal—the Governor and almost all State officials have spoken out against the deintermixture proposal—and hundreds of private citizens have taken the time to speak out against the elimination of VHF television service from South Carolina's capital city. Certainly the public and the public interest must be of primary consideration in any Commission deliberation on this proposal, and such interest is for the retention of VHF service in Columbia.

10. If the Commission, for any reason, remains unconvinced by these and other comments that its deintermixture proposal should be abandoned or dismissed, it should schedule this matter for a full adjudicatory hearing, preferably in Columbia. Further, the Commission should schedule the oral argument requested by the petition filed by Governor Hollings and others in this proceeding on September 1, 1961. The State of South Carolina should have the right to participate fully in both such proceedings.

Wherefore, the attorney general of the State of South Carolina and the office of the attorney general respectfully requests that the deintermixture proposal for Columbia, S.C. (docket No. 14245) be abandoned forthwith.

Respectfully submitted,

STATE OF SOUTH CAROLINA,
By DANIEL R. MCLEOD,
Attorney General.

Mr. MCLEOD. I find that the position that Columbia, S.C., is in is very similar to the situation which was outlined with respect to Montgomery, Ala.

I have presumed in this statement to refer to the fact that I speak for the people of South Carolina.

I assume that for this reason, that as a part of the statement which I have submitted, it refers therein to the endorsement of this bill and the condemnation of the proposed action by the FCC to take away the only television VHF station which Columbia has.

That condemnation was made by the entire congressional delegation of South Carolina, the leaders of both political parties, members of the legislature, members of the legislative delegations of all of the counties affected by the area included within the range of WIS–TV; religious leaders, cultural leaders, presidents of all the major colleges of the State: About 90 persons in positions of leadership and responsibility and wide knowledge in South Carolina.

And in addition to that, there are other signatories to a similar resolution condemning this action and upholding the position which I attempt to present in my statement here today, signed by various industrial, governmental, municipal, political, charitable organizations throughout the entire State.

I point that out, Mr. Chairman, and gentlemen, to attempt to show that the action of the Federal Communications Commission is opposed without substantial deviation, almost unanimously, by the entire people of South Carolina.

Therefore, I think that I speak with some assurance in saying that I speak for the people of the entire State when I uphold or attempt to endorse the provisions of H.R. 9267 and express the disapproval of the people of my State of the proposed action by the FCC to deintermix and thereby eliminate VHF from the capital of my State.

Now, that television station covers about 32 of the 46 counties in my State, and within the range of that station, there are about

900,000 persons and that is somewhat less than one-half of the entire population of South Carolina.

If this deintermixture or this alleged deintermixture takes place, it does not in effect amount to a deintermixture because those persons who live in the various parts of central South Carolina would then be compelled to resort to VHF listening from areas, as in Montgomery, ranging from 85 miles up to 125 miles—August, Charlotte, Savannah, Greenville in South Carolina, and Florence in South Carolina, Augusta in Georgia—completely surrounded, so that there would in effect be no deintermixture if this adoption is made by the FCC as proposed by it.

On the contrary, the UHF, as the committee, well knows, will reach about 30 miles. That is technically hampered in my State because of the presence of pine foliage and other terrain features.

Within that area, it was a surprising discovery to me to find that a count, house by house, within that area made by the university, showed that very few persons are equipped to receive UHF.

They rely upon the distribution of communication from WLIS–TV. Therefore, this deintermixture again would actually not result in a true deintermixture.

Aside from the fact that they are not equipped at the present time, we are faced with something that has already been referred to here this morning, and that is the additional cost that will be imposed upon thousands and thousands of people if they have to equip their receivers which they now have so as to receive UHF in the area where VHF is taken away from them.

They will not resort to that for financial reasons. They will not resort to it because they are unalterably opposed to this proposal.

They will on the other hand, reach out for other VHF stations, but they will object to that principally because there is being taken away from them by this selective deintermixture a place which they, from the time of the establishment of the State capital in 1796, have looked to as a central focal point for all communications in our State. As in Montgomery, it is the center of government, it is the focal point of education activities, economic activities, transportation activities, cultural activities—the people are accustomed to looking to Columbia for the central distribution of news and entertainment, particularly news along a governmental line.

Therefore, they object to being deprived of that.

I should like to call to the committee's attention also a resolution which I omitted to mention a moment ago and which is attached to the statement which I have submitted. That was unanimously adopted by the General Assembly of the State of South Carolina, and endorsing the feautres of H.R. 9267 introduced by Representative Roberts, expressing the unanimous disapproval of the Legislature of South Carolina against the removing of VHF–TV from the capital city where it belongs and where it has always been.

Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Attorney General, thank you for your statement. The resolution referred to will be included in the statement, as well as the other attachments to your statement.

I might say that our late, departed friend and colleague and your very able Congressman from South Carolina, Mr. Riley, was a cosponsor of these bills that you refer to.

Your very able Member from South Carolina, who is a member of this committee, a very good member, who unfortunately could not be here this afternoon. This is due to the fact that he is on a mission for this committee at the present time; I wanted to mention that; you probably already know it; Mr. Roberts made the arrangements for him. He wanted to be here.

We want to say that in him, you have not only a very fine and able Member of Congress, but a very fine, able member of this committee who is highly appreciated and respected by the members of this committee and all the Members of Congress.

Mr. McLeod. Thank you, Mr. Chairman.

Mr. Roberts. I just want to emphasize what the chairman has so well said, Mr. Attorney General, that Mr. Hemphill is away on a very important mission for the committee. He wanted to express to you and to his colleagues from South Carolina his regret that he was not able to be here this afternoon. I can assure you that he is well able and fully capable of taking care of those from South Carolina.

The Chairman. Mr. Springer?

Mr. Springer. The attorney general of Illinois appeared here the other day in behalf of the people of the State of Illinois, looking after their best interests. I am glad to see that the attorney general of South Carolina is here looking after the interests of the people of South Carolina.

Mr. McLeod. I believe the attorney general of Illinois adopted substantially the same position.

Mr. Springer. He did.

The Chairman. When we get the rebels and yankees together, it is good.

Mr. McLeod. Mr. Chairman, the resolutions I referred to that were passed the other day were signed by the only Republican member of the legislature and by the NAACP, and I am in full accord with both of them.

The Chairman. Which I would assume is a rare oddity.

Mr. Younger?

Mr. Younger. That being the case, we might as well adjourn.

The Chairman. Mr. Sibal?

Mr. Sibal. I am very pleased about this public acknowledgment of the two-party system in South Carolina.

Mr. McLeod. There has since been one additional Republican elected to the South Carolina Legislature last week.

Mr. Springer. Mr. Attorney General, I am glad that our party down there now has both a minority leader and also a candidate for speaker, too.

The Chairman. Thank you very much. I do not want to carry this two-party system too far in South Carolina, though.

Thank you very much, Mr. Attorney General. We are glad to have you with us.

The Honorable Lester Bates, mayor of Columbia, S.C.

Mr. Mayor, we are glad to have you with us.

STATEMENT OF HON. LESTER L. BATES, MAYOR OF CITY OF COLUMBIA, S.C.

Mr. BATES. Mr. Chairman, and members of the committee, my name is Lester L. Bates. I am mayor of the city of Columbia, and I appreciate very much the opportunity to express my views, and I think I can assume from the response in opposition to this movement to eliminate our only VHF station, I think I can assume that I am speaking for all of the people of South Carolina.

As you probably know, sir, we people in South Carolina are divided in many, many ways. However, I would like to call your attention to the fact that we are not divided on this question.

We are unalterably opposed to the elimination of our only VHF station.

Now, to appreciate our position, you would have to understand our situation. Approximately 5 years before Washington, D.C., was planned, Columbia, S.C., was planned. In fact, I think that they are probably the only two capital cities that were actually planned.

Of course, this city here was planned to serve all of the States in the Union, whereas the city of Columbia was planned to serve every county in South Carolina.

Columbia is not only the geographical center of South Carolina, but is so located as to be in a strategic position in the entire southeastern section of our country, making it the ideal distribution center.

In addition, Columbia is the education center. We have six colleges there.

Columbia is the cultural center of South Carolina. It is the medical center of South Carolina. It is the transportation center of South Carolina. It is the cultural center of South Carolina, the banking center of South Carolina, the business and industrial center of South Carolina.

Only recently, after many months of investigation, the Post Office Department concluded that Columbia was the logical place to put one of the 64 regional post offices. That is being planned at this time, to serve all of the State of Carolina. If there is one thing I have gotten from this hearing, it is this: All along, I was under the impression—although I have no personal interest—I was under the impression that UHF was giving about No. 2 service. Those who represent UHF today have convinced me that they are only giving about third-grade service. So I submit to you that to deny the people of the capital city of South Carolina this service would certainly be out of line in the thinking of we people here in Columbia, S.C.

I call your attention to these things for the sake of emphasizing what I have incorporated in the statement here, which I hope to leave with you.

I thank you very much for the opportunity to appear before you in behalf—in opposition to the elimination of our only VHF station.

Thank you.

Mr. ROBERTS (presiding). Thank you, Mayor; the committee is very appreciative of your statement. Without objection, your formal statement will be filed for the record.

(The complete prepared statement of Hon. Lester L. Bates is as follows:)

STATEMENT OF HON. LESTER L. BATES, MAYOR OF THE CITY OF COLUMBIA, S.C.

Mr. Chairman and members of the committee, my name is Lester L. Bates. I am mayor of Columbia, S.C., I am here to express the views of my office and the people of the Greater Columbia area on legislation which is proposed in H.R. 9267 and its companion bills, two of which were introduced by South Carolina Congressmen Robert W. Hemphill and the late John J. Riley.

As you know, my city and its people are faced with the possible loss of our only VHF television facility under the Federal Communications Commission's deintermixture proposal. The provisions of H.R. 9267 and its companion bills, therefore, are vitally important to us for they could assure us that our VHF channel would remain as it is.

The importance of a wide-range VHF television facility to Columbia cannot be overemphasized. We are a capital, but more than that, we are the main service area for the entire State. Each generation of leadership in Columbia has attempted to provide facilities in our city to serve—not just Columbia—not just the Greater Columbia area—not just the South Carolina midlands—but the entire State. In VHF television we have such a service facility.

What happens in Columbia is news and of interest to all the people of South Carolina. As the capital, we house the offices of the Governor, the Lieutenant Governor, the general assembly and nearly all of the State's main commissions and agencies. In addition, Columbia is the locale of the majority of regional and district offices of the U.S. departments that are located in South Carolina. To such a political center, VHF TV is essential.

Columbia is also the wholesale and distribution capital of South Carolina because of its unique location, only 3 miles from the exact geographical center of the State. Columbia, in fact, has more wholesale and distribution establishments and does more wholesale business than does any other metropolitan area in South Carolina.

The importance of VHF channel 10 and its wide coverage to the business, financial, and trade interests of our State has been repeatedly evidenced in the deintermixture proceedings before the FCC by comments of Governor Hollings, the South Carolina congressional delegation and general assembly, newspaper eidtorials, the South Carolina Development Board, the State chamber of commerce, and numerous local chambers of commerce and individual citizens throughout the State. I have attached two editorials from Columbia's newspapers which further attest to this fact.

In Columbia, we further have an educational focal point, for we house the University of South Carolina, the largest educational institution of higher education in the State. Columbia is also the home of five other colleges and universities. The State department of education is located in Columbia, and it provides administrative leadership and supervision for all our public schools on State, county, and district levels.

To these bodies, a television facility which can reach out from Columbia and inform great areas, is an essential and they depend on it in their daily activities.

Columbia's services, however, are more than metropolitan in character, for the rural and farming population in South Carolina look to our city for their news and information about the weather, commodity markets, and developments in agriculture and forestry. Deintermixture would deprive much of this population of this service and would turn them away from Columbia to other VHF stations in other States for farming news and information.

Because of its nature, Columbia is growing and expanding at a record pace. We are now the largest metropolitan area in South Carolina and the second largest metropolitan area in both North and South Carolina. We are developing new industry on a daily basis, and greeting new citizens at an even more rapid rate.

With these factors as the basis for our character, it is easy to see why we are the communications center of the State. Our activities are interesting and important to the people.

We are the State's transportation center. Our morning newspaper is the largest in the State and has daily circulation throughout South Carolina, and our VHF television station is looked to because it is in Columbia and is an integral part of the city's communications system.

Columbia is proud of its UHF stations, but they are no substitution for wide-range channel 10.

Deintermixture would stifle our growth and reduce our ability to inform and serve wide areas of our State. We would lose our importance to our own South Carolina citizens who generally are not equipped for UHF and are served by many VHF stations from such cities as Augusta, Ga., Charlotte, N.C., Savannah, Ga., and Florence, Charleston, Greenville, and Spartanburg in South Carolina.

Deintermixture will not improve our potential to grow as a city in competition with the areas which surround us. It will, in fact, begin our destruction as a focal point of public interest.

For the past 8 years, the people of my State have looked to channel 10 and its licensee, WIS–TV, as perhaps their most important source of information, news, and entertainment. They are alarmed now, as I am, because this source is threatened.

The people who live and work in South Carolina know the importance of VHF channel 10 to them, and the people who reside in Columbia know the importance of wide-range VHF television to their city.

The provisions of H.R. 9267 and its many companion bills can save the services of VHF television in Columbia and improve the position of our UHF stations. All-channel receiver legislation is important, but we do not feel that the destruction of any existing VHF services will contribute to the solution of the problem.

I am very grateful for this opportunity which the committee has afforded me to express the views of my office and the people of the Greater Columbia area on this vital legislation. Thank you.

[From the Columbia Record, Mon., Aug. 14, 1961]

COLUMBIA TV: AN APPEAL TO THE FCC

The Federal Communications Commission is considering making Columbia a strictly UHF city with no television station that can reach beyond the line of sight, with no VFH station having a statewide range.

Let us look at Columbia and the effect such a move would have:

Columbia is the capital, the geographical center and the largest city in South Carolina. It is also the service center of a large community of counties. It is South Carolina's focal point for Federal, State, and municipal activities. It is the convention host for organizations interested in every phase of the people's activity, welfare, and progress.

Residents of this neighborhood of counties look to Columbia as the most central point capable of providing major attractions and events in sports, entertainment, cultural pursuits, religion, education, and economics. Columbia is a market and a distribution point for their products, a transportation hub with highway spokes extending to every town, city, hamlet, and farm. It is a rail and bus center, the embarkation point for their express trips and shipments by rail, road, and air.

It is the seat of the State university and the home of four other arts and sciences colleges with religious affiliations. Most of the populations of these institutions come from places that look upon Columbia as the extension of their localities.

To accommodate the needs and desires of the people of the community of counties, Columbia provides hospital and medical facilties, huge assembly halls and stadiums, large theaters and tremendous stores, and a wide variety of technical skills and services. In the city's planning program now are a new post office, a jet airport, a coliseum and a large, modern municipal theater.

Columbia's geographical situation is unique. The closest South Carolina city of more than 50,000 population is Greenville, 106 miles away. Charleston, in the other direction, is 113 miles from Columbia. Distances to the other nearest cities over 50,000 are 94 miles to Charlotte, N.C., 72 to Augusta, and 146 to Savannah, Ga.

Inside the periphery of larger cities is the Columbia community of common interests, extending farther on its natural diameter than any other city of more than 50,000 within 200 miles. In this community the people read the same newspapers, participate in the same leagues, share the same expert services and mass facilities, and view programs of the same television stations.

Columbia has only one TV station that can reach them all. It has one other, WNOK, that is limited in range by its frequency, and another UHF station in prospect.

The one station that can serve the entire area of Columbia's neighborhood of counties is WIS–TV, the companion of the city's first radio station, which has been in operation 30 years.

WIS–TV has served its viewing area well, helping to promote the common interests that bind the city of Columbia and its trading area together. Its programing has consistently gone beyond urban bounds to bring in talented performers and leaders from throughout the territory. By film and remote facilities it has given attention and appreciation to events and developments of the area where its telecasts are seen and heard.

To restrict Columbia to UHF would limit the range of WIS so that much of the Columbia community would be cut off from programs of greatest personal interest and concern to them. Thousands within the family of common interests would have no adequate television reception at all. The step would be critical retrogression in an area where progress, growth, and solidity are reflected in all indexes.

We appeal to the men of the Federal Communications Commission not to deny South Carolina viewers the programs from their capital and mutual city. We also respectfully ask that they allow Columbia's other stations the privilege of extending their ranges and services so that the people will have increased opportunity of selection and choice.

[From the State, Columbia, S.C., Friday, Aug. 11, 1961]

A PENDING BLOW

Should the Federal Communications Commission eventually implement its intent to take away from Columbia its VHF (very high frequency) televising facility, the result for the prestige and the economy of the city would be a most unfortunate one.

This would mean Columbia's outreach by television would be substantially restricted and that territory where the city's voice is now heard would be wide open to still-going VHF stations in neighboring cities.

Columbia is one of eight cities included in the Commission's proposal that their televising be limited to UHF (ultra-high frequency) and its shorter range, or outreach.

Not all of these cities would be similarly affected. Not all would be subjected to nearby VHF competition. But Columbia is one which would be most adversely affected. It is surrounded by cities which would still have the long range of VHF and the stations of which would reach into the territory where Columbia would be virtually silenced.

This the Commission recognizes and presumably will take into consideration before issuing an order divesting Columbia of its VHF facility.

It is right that high public officials and others are making representations to the Commission in Columbia's behalf. The effect of having no VHF televising here would go far beyond that of causing irreparable loss to the city's VHF outlet, station WIS–TV; it would extend its damage to the city as a whole and its surrounding territory.

It is the law that the Federal Government allocate areas of operation for televising and undoubtedly this is necessary. But we hope we can rely upon the Commission, in carrying out its regularity function, not to destroy that which already exists as it faces perhaps mandatory changes, from time to time.

No inference is intended here that the Commission is acting arbitrarily, whimsically, or thoughtlessly. It is proceeding with deliberation. It has invited comment on its announced intent. It undoubtedly can present its own justification for its proposal. But the result to Columbia would be a heavy blow if the plan should ultimately become an order.

Mr. ROBERTS. Mr. Springer?

Mr. SPRINGER. Does Charleston have a "U"?

Mr. BATES. No; they have three. That is one thing that is inconsistent to us. They have three VHF stations. In fact, they had two, and only 3 weeks ago, they were granted another VHF channel.

Mr. SPRINGER. In Charleston?

Mr. BATES. Yes; that is approximately 100 miles from Columbia, and under the proposed plan, the capital city would be relieved of the only VHF station we have.

I might add right here that in my city, the city of Columbia, the only UHF station of my good friend—they selected UHF, they had an opportunity to apply for VHF, but they decided that they wanted UHF. Then our other station, channel 10, of course, they applied for for the VHF channel.

So they got what they asked for.

And I would like to say this, in fairness to them, that they have not called upon me or anyone else that I know of in opposition to this.

In fact, we think that we are entitled to another VHF station. Our VHF station is serving so well until we would like to have another VHF station and we think that we are entitled to it.

Mr. SPRINGER. Thank you, Mr. Chairman.

Mr. ROBERTS. Mr. Younger?

Mr. YOUNGER. I don't quite get your situation. You say you have two UHF stations.

Mr. BATES. We have two UHF stations in Columbia. The first station we had there was the UHF station and then the VHF station came along, and here a month or two ago another UHF station was started.

Mr. YOUNGER. Do you know the percentage of receivers in your area that are equipped to receive both UHF and VHF?

Mr. BATES. No, sir, I do not.

Mr. YOUNGER. Are your UHF stations making any money?

Mr. BATES. Yes. I think at the present time they are a little more than breaking even. That is my information. And that is the station, WNOK, that we would like to see be granted the VHF, permission to operate the VHF station. As a matter of fact, they applied for it before and the city council passed a unanimous resolution recommending that they be permitted to change to the VHF.

Mr. YOUNGER. Then your testimony and your opinion is that UHF and VHF stations in the same locality can exist on a competitive basis.

Mr. BATES. The truth of the matter is I think the VHF assists the UHF.

Mr. YOUNGER. How do you mean "assists"?

Mr. BATES. Well, I think it assists because of the tremendous business that they are doing on the national scale enables the UHF to have more of the local business.

Mr. YOUNGER. Are both your VHF and your UHF stations on network?

Mr. BATES. Yes.

Mr. YOUNGER. That is all.

Mr. SPRINGER. That is all.

Mr. ROBERTS. Thank you. We appreciate your appearance.

Mr. ROBERTS. Mr. R. Powell Black, of Florence, S.C.

STATEMENT OF R. POWELL BLACK, CITY MANAGER, CITY OF FLORENCE, S.C.

Mr. BLACK. Mr. Chairman, will you accept my statement in the record, please, and let me make one or two comments?

Mr. ROBERTS. Without objection, that will be done.

Mr. BLACK. My remarks involve the use of a map which is being presented at this time. It is an insert. If you would withdraw it when you get the statement, I would like to refer to it, please.

Mr. ROBERTS. Do you wish this map to be included in the record?

Mr. BLACK. It is in color, and if it makes any difference to you from a reprinting standpoint——

Mr. ROBERTS. I think the color would. I doubt if we have anything but black and white in our record, but we will include it in the files of the committee for the use of the committee.

Mr. BLACK. Thank you, Mr. Chairman.

This morning I thought I was in the wrong place when I heard ABC and other people give their testimony. However, it was encouraging to hear the remarks of the chairman, later, when he stated he was from a rural area because I, too, represent a rural area.

If you will look at the map, you will see that white section, the center of which is Columbia. This map purports to show you what this whole thing looks like to us.

Now, this small white circle in the center shows what the UHF coverage would be if the VHF channel, No. 10 was removed from Columbia. The VHF now goes out to the red circle, the extremities, and, of course, sometimes beyond. If you will look at the dark red portion, you will see a heavy black dot which shows you the location of Florence.

I am here today to support the Roberts bill, the Hemphill bill, and their companion bills with two points that I would like to make if you will either keep your eyes on the red portion or refer to it occasionally.

The two things haven't been mentioned, except briefly, this afternoon. One is that somewhere along the line the people who will be directly affected should have a voice in this proceeding, and that is why I am here at the direction of the mayor and city council, representing them officially. I am also here as an individual.

The people in this red expanse live in a very rural area. In Florence we do have one VHF channel (No. 8) but if channel 10 (VHF) were removed from Columbia, as is proposed by deintermixture, this rural area in which I live, in this darkly shaded red area, would lose all NBC programs. We would also lose all of our color programs.

Before coming up here yesterday I called the largest repair place in Florence and asked him to estimate how many color sets there are in this rural area. He estimated in excess of 300 sets. We only get color from Columbia, channel 10.

The other point I would like to make is that in the rural areas of the South, and I travel quite a bit in the South, it has been traditional that parked beside a lot of the farm homes and the tenant farmers' homes you used to see a nice car. I don't know why it used to be Buick, but it did. Nowadays the car might be slightly older, but you see the TV antennas. In many places today there is no car

at all, only a battered-up truck or nothing. But the TV antenna is still on the house. I would like to submit to this committee that the people back home hear a lot about "we the people," and who "the people" are. As I recently wrote Mr. Minow, in connection with the FCC hearings, the people they keep trying to protect in this "vast wasteland" of TV are people like me and like the other fine people down in this area of South Carolina which will only have one channel if channel 10 is taken away. It is of interest that there has been one UHF channel assigned to Florence, but there has been no interest that I know of by any party to come in and actually start operating one.

In closing, I recently came across a short paragraph from the Flying Feathers Pigeon Club magazine which said that "small minds discuss people, average minds discuss events, but great minds discuss ideas." You gentlemen aren't here to discuss little things. You aren't here to discuss either people or events, but we are glad you are here to discuss the idea to which you have attached yourselves.

Thank you, sir.

The CHAIRMAN. Mr. Black, thank you very much for your statement.

We are very glad to have your statement, sir.

(The prepared statement and map of Mr. Black are as follows:)

STATEMENT OF R. POWELL BLACK, CITY MANAGER OF THE CITY OF FLORENCE, S.C.

Mr. Chairman and members of the committee, my name is R. Powell Black. I am city manager of the city of Florence, S.C., and I appear before you now both as a private citizen who is concerned with the future of television service in my State and as an official representative of the city of Florence at the direction of the mayor.

My city is located in the northeastern section of South Carolina, some 80 miles from Columbia. Quite naturally, therefore, I find myself, and the more than 200,000 citizens of my area, vitally interested in the provisions of the legislation you are considering in H.R. 9267 and its several companion bills. In essence, they mean life or death to the continuation of our television service from our capital city. I have attached an engineering map which attests to this fact.

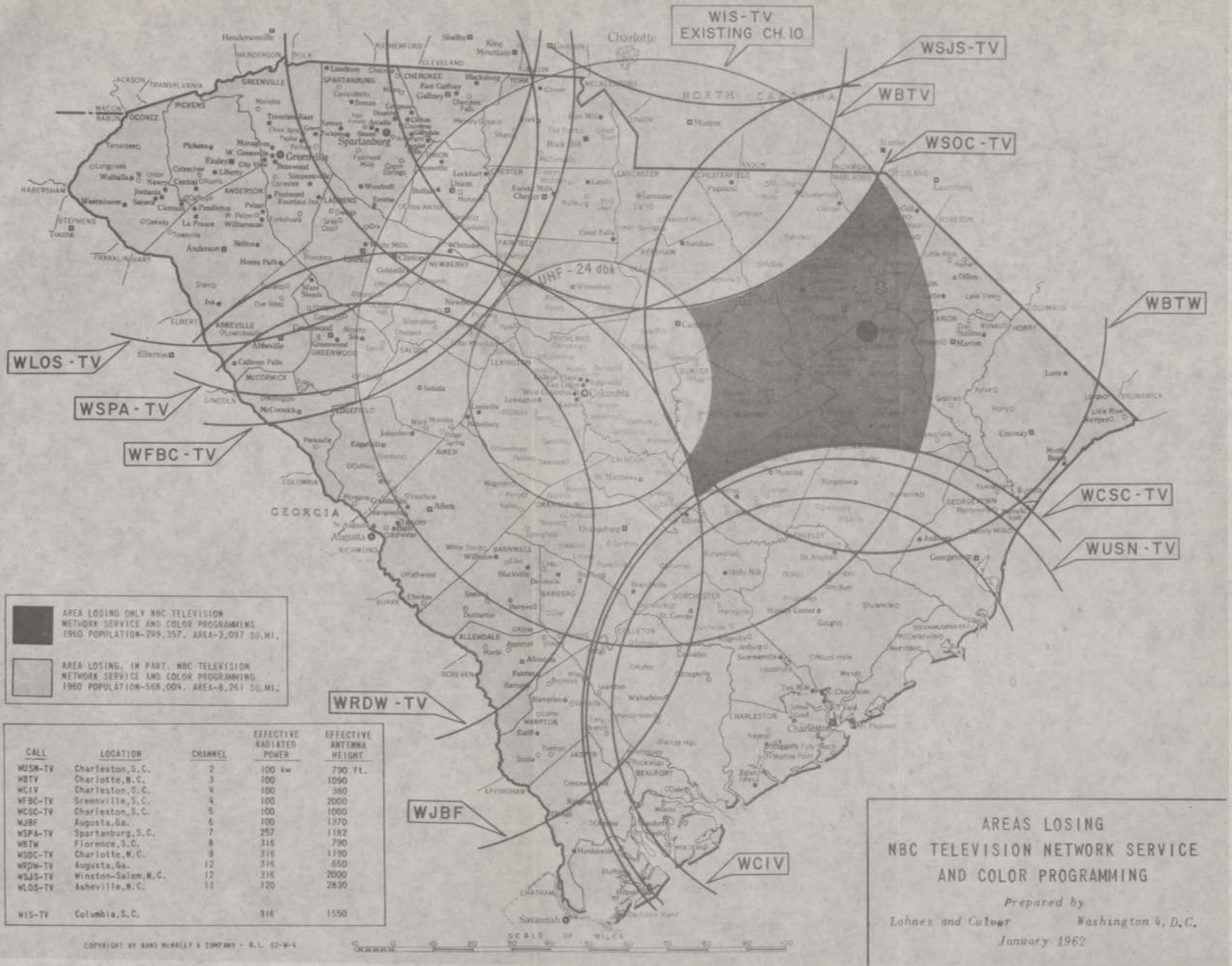
Today northeastern South Carolina receives television signals from two primary sources: WBTW-TV, VHF channel 8 in my city of Florence, and WIS-TV, VHF channel 10 in Columbia. Due to our distance from Columbia we do not, and cannot, receive any service from the Columbia UHF stations.

Channel 8 in Florence provides us with both CBS and ABC television network programing. In addition, we look to this local television facility for our news and information of our own immediate area. We do not minimize the importance of this service. However, its existence has not blinded us to our additional need for channel 10 in Columbia which supplies us with our NBC programs and news and information about our State government, its actions, and its leaders.

If the Federal Communications Commission's deintermixture proposal is put into effect and channel 10 is deleted, it will limit us to just one television service and completely deprive us of any television reception from Columbia. We look at the deintermixture proposal, therefore, as diametrically opposed to the public interest of the 249,357 citizens in our area. We fail to see its merit. We do not believe three limited-range television stations operating in Columbia can be called an equitable replacement for one wide-range station which can and does reach out from our capital and serve great areas of the State.

H.R. 9267 and its companion bills would guarantee that the allocation of VHF channel 10 remain in Columbia for all time and that the people of my area could continue to rely on television service from their capital.

As a private citizen, I would like to say at this point that last year I purchased a color television set at considerable expense. I made this investment in good faith, realizing that I would have to depend on NBC for my color programing fare. If channel 10 is destroyed in Columbia, there will be no more NBC service



CALL	LOCATION	CHANNEL	EFFECTIVE RADIATED POWER	EFFECTIVE ANTENNA HEIGHT
WUSN-TV	Charleston, S.C.	2	100 kw	790 ft.
WBTV	Charlotte, N.C.	3	100	1090
WCIV	Charleston, S.C.	4	100	380
WFBC-TV	Greenville, S.C.	4	100	2000
WCSC-TV	Charleston, S.C.	5	100	1000
WJBF	Augusta, Ga.	6	100	1370
WSPA-TV	Spartanburg, S.C.	7	257	1182
WBTW	Florence, S.C.	8	316	790
WSOC-TV	Charlotte, N.C.	9	316	1190
WRDW-TV	Augusta, Ga.	12	316	650
WSJS-TV	Winston-Salem, N.C.	12	316	2000
WLOS-TV	Asheville, N.C.	13	120	2830
WIS-TV	Columbia, S.C.		316	1550

AREAS LOSING NBC TELEVISION NETWORK SERVICE AND COLOR PROGRAMMING

Prepared by

Lohnes and Culver *Washington 4, D.C.*

January 1962

81657 O - 62 (Face p. 362)

available to me—and along with others, I will be deprived of all my color reception. I make this remark only to illustrate one of the many vital needs we in the northeastern section of South Carolina have for the services of Columbia's VHF station.

As Mayor Bates has told you, Columbia is truly the capital of our State. The people of the city of Florence and its surrounding rural areas look to Columbia not just for television service, but for leadership and guidance in business, civic, educational, cultural, religious, and industrial affairs.

Because South Carolina is a small State, we place major emphasis on our capital as a place where we can meet and exchange opinions and ideas on our growth and mutual problems. Such a statewide meeting place would soon lose its importance if it lost its ability to communicate with the people.

We in the Florence area do not object to the growth of UHF as a supplement to the VHF, but certainly we fear its development at the deliberate expense of our VHF service.

We endorse the concept of all-channel receiver legislation, and hope that it is not being used as a guise for a shift of all television to the ultrahigh frequency channels. H.R. 9267 and its companion bills would provide for the development and expansion of UHF service at the side of VHF, and would assure us that those television facilities which were designed to provide maximum service to wide areas would continue to do so.

Certainly in the study of any all-channel bill some consideration should be given to the future of those television facilities which have proven their ability to furnish news, information, and entertainment to the public. We ask you to take the existing VHF stations in mind and examine the services they are providing to the public. I am sure that such examination will point out to you their value to the people, and the need the people have for assurance that these services will not be lost to them.

In conclusion, I would like to say that I cannot urge you strongly enough to give favorable recommendation to H.R. 9267 and its companion bills. They provide safeguards that are needed by the people of my State and the entire Nation.

I thank you for this opportunity to appear before you and express my views on this matter.

The CHAIRMAN. Mr. Richard Shafto.

He isn't here. Mr. Shafto may include his statement in the record at this point if he desires.

The CHAIRMAN. Mr. Kalmbach?

STATEMENT OF R. LYNN KALMBACH, GENERAL MANAGER, SOUTH CAROLINA EDUCATIONAL TELEVISION CENTER

Mr. KALMBACH. Mr. Chairman and members of the committee, my name is R. Lynn Kalmbach. I am general manager of the South Carolina Educational Television Center which is located in Columbia, S.C., and I appear here today as a representative of the South Carolina Educational Television Commission. I will direct my remarks to H.R. 8267, the provisions of which are of major importance to our commission, the people of my State, and the development of our educational television system in South Carolina.

The South Carolina Educational Television Commission was created in 1960 by the State legislature to make a study of the use of educational television and its adaptation for instructional purposes in the schools of our State.

After careful examination of educational television programs in many other States, we recommended to the legislature that South Carolina utilize closed circuit facilities, leased from public utilities. We selected this means of reaching our classrooms instead of the four open-circuit television frequencies reserved for educational use in South Carolina in the FCC allocation plan of 1952.

Those recommendations were endorsed by the legislature today from the studios of the South Carolina Educational Television Center in Columbia we transmit by way of common carrier closed circuit, a schedule of seven classroom subjects to 67 schools throughout the State. By September of this year we will have 11 subjects available to 130 schools and it is our hope that in the very near future we will be providing every rural and city school in South Carolina with classroom instruction on our closed circuit system.

It is our conclusion that in South Carolina the use of closed circuit television, permitting as it does the simultaneous transmission of more than one lesson, is the logical and practical means for inclassroom teaching.

Commercial television stations in South Carolina—both UHF and VHF stations—have been generous in providing their facilities without cost for educational purposes. In the beginning, closed circuit facilities have not been available to us in all the counties of the State. Where we saw the probability that such circuits would soon be extended to us, we have pursued a policy of availing ourselves of free time on a limited number of commercial stations to broadcast programs designed primarily for classroom use so that their educational value might be tested in schools not yet interconnected. In one instance, such tests were made by a Roman Catholic parochial school, not a part of our public school system, but to which school our classroom lessons would be made available if they later decided at their own expense to become interconnected. Incidentally, they have become interconnected. Thus, we have used existing facilities on an interim basis to speed the development of our closed circuit.

Since the funds for the development of our educational television system are substantial—and because they must come from the South Carolina Legislature, we have thought it essential that the public be be kept informed and sympathetic to the educational needs of South Carolina and the progress of our closed circuit ETV system. We have, therefore, produced programs especially directed to the inhome adult audience, and these programs have been generously carried by commercial television stations throughout our State.

Addressing myself to the particulars of H.R. 9267, the Roberts bill, it is the feeling of our Commission that the time will come when the educational needs of South Carolina will be enlarged through the use of UHF facilities. This will be especially true should we later—and as a secondary objective—develop television programing which satisfies the educational desires of the adult inhome audience. Then, it will be highly desirable that the maximum number of homes be equipped with all-channel receivers.

However, the major point of my testimony is to say to you gentlemen that the Educational Television Commission of South Carolina is concerning itself with inclassroom teaching. To fulfill this purpose, we do not foresee that it would be either practical or economical for us to operate a multitude of UHF broadcasting stations.

Our commission believes that the educational interests of South Carolina can best be served by maintaining all VHF channels, including channel 10. We are emphatic, therefore, in our conclusion that there is no foreseeable educational need for the building up of the UHF at the expense of the VHF in our State.

We are strongly convinced that channel 10 is of great importance to the general educational needs and requirements of South Carolina because—

1. It is centrally located in our capital city which is the home of the University of South Carolina and of our educational television center.

2. It affords an expanded coverage of our State—available only from VHF.

3. It offers a large audience potential, the result of a strong, established service.

Thus, we are concerned with any threat to its preservation.

H.R. 9267 and its companion bills would guarantee the continued allocation of VHF channel 10 to Columbia and at the same time allow for the growth and development of the UHF.

We urge that H.R. 9267 and its companion bills be reported favorably.

There are attached to my statement seven letters from organizations and individuals who represent practically every facet of educational activity in South Carolina. I am not going to read these letters to the committee, but I want you to know that they have been filed with the Federal Communications Commission as comments on the Commission's plan to deintermix Columbia. They have come from the South Carolina Department of Education, our State University, from Clemson College, from the South Carolina Education Association, the South Carolina Association of School Boards, from the board of commissioners of the Columbia public schools, and from the head of the Extension Division of the University of South Carolina. I do not speak for these people, but I have included them because—together with my remarks—they indicate the widespread interest of educators to preserve channel 10 for central South Carolina.

I appreciate the opportunity which the committee has afforded me to express the views of the South Carolina Educational Television Commission on this vital legislation. Thank you.

The CHAIRMAN. Thank you very much, Mr. Kalmbach. We are glad to have your statement and the attachments referred to will be included in your statement.

Mr. KALMBACH. Thank you.

(The attachments referred to are as follows:)

STATE OF SOUTH CAROLINA,
DEPARTMENT OF EDUCATION,
Columbia, S.C., November 13, 1961.

Reference: Docket No. 14245—In the matter of deintermixture of Columbia, S.C.

FEDERAL COMMUNICATIONS COMMISSION,
Washington, D.C.

GENTLEMEN: As State superintendent of education of South Carolina, I am concerned about broader utilization of all communications media in improving the educational level of the citizens of the State. VHF television affords the opportunity of reaching vast sections of the State. It is inconceivable that Columbia, which is the capital and largest city, be prohibited from having this type of television service. Such provision is available in Charleston, Greenville, and Spartanburg; but Columbia, being nearer the center of the State and the center of the State government, should have the privilege of reaching a greater area of South Carolina.

An important part of the education of all citizens is familiarization with the processes of local government. Over a period of many years, WIS–TV has

provided substantial programing of activities of State government. If this station's coverage is reduced, these services would be denied the many citizens living beyond the reach of UHF service.

During the summer of 1961, WIS–TV cooperated with the adult education section of the State department of education and with the State mental health commission to produce and present the program, "Vital Issues—People." This program was presented without charge to the department of education and the mental health commission. This is just one of the many ways in which the station can fulfill and has fulfilled its responsibilities in the areas of public enlightenment.

Yours very truly,

JESSE T. ANDERSON,
State Superintendent of Education.

UNIVERSITY OF SOUTH CAROLINA,
Columbia, December 6, 1961.

In re docket No. 14245, deintermixture of Columbia, S.C.

Mr. NEWTON MINOW,
Chairman, The Federal Communications Commission,
New Post Office Building, Washington, D.C.

DEAR MR. MINOW: As someone who is concerned with the overall program of education in the State of South Carolina, I cannot help but believe that deintermixture as it has been proposed for Columbia will be to the extreme detriment of the entire State.

WIS–TV, the VHF television station involved in the Commission's proposal for Columbia, provides this university with the equivalent of a statewide television voice. This voice is especially important to our extension division which is responsible for the university's program of adult program.

For more than 3 years, WIS–TV has carried as a public service a daily 20-minute program entitled, "Let's Find Out," which is produced and planned by our extension division. We have received comment on this program from every county in our State and feel that it provides an extremely important educational service to our adult population.

The importance of a wide-range VHF television station in South Carolina's capital, however, goes much deeper than the service it can render to just one institution or organization. To correctly evaluate the need for a VHF television station in Columbia, we must look to the people and see what they must have in the way of education, news, weather, sports, entertainment, and information from their major metropolitan city. The answer to this, I am sure, is quite evident to you—they must have the best that is available, and this is exactly what WIS–TV endeavors to give them.

In the fields of public service, news, weather, and information, WIS–TV has made many valuable contributions to this State, and to take it away from even one home that was not equipped to receive UHF would be a serious injustice and violation of the public interest.

I am sure that the Commission is concerned about the public in this matter, and I feel that I would be violating the interest of the citizens of this State if I did not voice this protest to your proposal on behalf of the university.

I urge you to weigh the consequences of deintermixture on South Carolina. I am sure that if you do so, you will dismiss and abandon this proposal.

Sincerely yours,

ROBERT L. SUMWALT, *President.*

CLEMSON COLLEGE,
Clemson, S.C., August 21, 1961.

Hon. NEWTON MINOW,
Chairman, Federal Communications Commission,
New Post Office Building, Washington, D.C.

DEAR MR. MINOW: As president of Clemson College I have a direct personal and professional interest in television broadcasting in South Carolina. I have followed with great interest the announcement of the objectives and the ap-

proach you have taken as Chairman of the Federal Communications Commission to improve the quality of television broadcasting nationally.

In my opinion there is no question that the greatest problem we face, not only in South Carolina but nationally, is that of improving the quality of education at all levels, especially adult education. Television provides one of the greatest educational mediums available to this country.

Because of these concerns I am taking this occasion to urge you to reconsider the proposal to take away from station WIS–TV in Columbia, S.C., its present allocation of channel 10 forcing this station to switch to a UHF channel.

In January of 1960 our school of agriculture began a live television service called "Agricultural Panorama" over WIS–TV. For more than a year this program was broadcast live. Recently we made arrangements with the educational television center to utilize its facilities to video tape the program in order that it might be shown over other stations to reach every farmer and other interested citizens throughout South Carolina. As a result, in addition to the showing over station WIS–TV, WFBC–TV in Greenville and WUSN–TV in Charleston carry this program. It has proven not only to be good entertainment but of great educational benefit to the viewing audience and I am sure you will be interested to know that within the past 60 days this program received a national award from the American Association of Agricultural College Editors, U.S. Department of Agriculture, as being one of the two best programs of its type in the Nation for the calendar year 1960.

As previously stated I have been greatly impressed by the sincerity of your purpose in improving television broadcasting and I have been equally impressed by your determination to achieve your objectives. I urge you not to disturb the present status of station WIS–TV. The management of this station has cooperated with this institution in every possible way in making public service time available and in doing anything else for the benefit of this State. To force this change would result in a very real disservice to the many thousands of South Carolinians who benefit from the services rendered by WIS–TV which would not be available if the station were forced to shift to a UHF channel.

With best wishes, I am,

Sincerely yours,

ROBERT C. EDWARDS, *President.*

THE SOUTH CAROLINA EDUCATION ASSOCIATION,
Columbia, S.C., October 24, 1961.

Hon. NEWTON MINOW,
Chairman, Federal Communications Commission,
New Post Office Building, Washington, D.C.

DEAR MR. MINOW: It was with deep concern and disappointment that I learned that the Federal Communications Commission had failed to grant a rehearing and reconsideration of its proposed changes in WIS–TV channel 10 in Columbia, S.C.

I feel that the proposed change would be detrimental to the best interest of our State. WIS–TV is doing an outstanding job in public service throughout most of South Carolina. For example, at the request of the South Carolina Education Association, the station is carrying the "Continental Classroom" series each morning for 30 minutes. This is a service to the teachers of South Carolina. The station is also running a series of films (13) each Sunday morning designed to raise the educational level of the people of our State.

The station is truly a disseminator of statewide information and as such renders a real service to the State of South Carolina. We need for it to remain in the same capacity as it is presently operating.

We, the teachers of South Carolina, realize that the Commission has its reasons for proposing the changes, but we sincerely feel that for the best interest of all our people it should remain as it is.

Sincerely yours,

P. M. COBLE, *Executive Secretary.*

SOUTH CAROLINA ASSOCIATION OF SCHOOL BOARDS, INC.,
Greenville, S.C., September 19, 1961.

Hon. NEWTON MINOW,
Chairman, Federal Communications Commission.
New Post Office Building, Washington, D.C.

DEAR SIR: I am writing to express my concern with the proposed action of the Federal Communications Commission which would eliminate wide-range television service from Columbia, S.C.

The South Carolina Association of School Boards, Inc., is a private corporation whose membership is composed of county and local school district board members throughout the State. We feel it is most important that we inform you of our opinion as private citizens of the unfavorable effect of any such action.

Wide-range television facilities located at our State capital provide the best means for dissemination of information concerning State government activities to all educational levels of our population. Television coverage of interesting sessions of the State legislature, press conferences held by the Governor and the State officials, and other programs originating from the State capital provide a unique instrument for social science education for a substantial segment of the States. Restriction of television service would force many citizens to rely on stations located in other States and deprive them of this opportunity for increased familiarity with the workings of their State government.

We appreciate the seriousness of your concern about adequate television coverage, but we also feel that any action to reduce the television voice of our capital city and most central metropolitan area by eliminating the only VHF station will not improve conditions but would present a more serious situation.

Your favorable consideration of our appeal will be greatly appreciated.

Sincerely yours,

BROWN MAHON, *President.*

RESOLUTION—BOARD OF COMMISSIONERS, COLUMBIA PUBLIC SCHOOLS

Whereas the Federal Communications Commission is now considering a proposal to take wide-range television service on channel 10 from Columbia, S.C., in order to establish all UHF television markets; and

Whereas channel 10, WIS–TV, is located in Columbia, the largest metropolitan city in South Carolina and the State's capital, and provides a service to the Columbia public school system in presenting news, features, and public service announcements to the children, parents, and teachers within the school district and other areas affected by this district: Be it, therefore

Resolved, That the members of the Board of Commissioners, Columbia Public Schools, Columbia, S.C., go on record as expressing their opposition to the Federal Communications Commission's proposal to remove the present VHF channel in Columbia, S.C., and as urging that no action be taken by the Federal Communications Commission now or later that would restrict the range of WIS–TV.

CALDWELL WITHERS, *Chairman.*
ROBERT S. DAVIS.
R. H. WIENEFELD.
E. M. WOODWARD.
ARTHUR M. WILLIAMS, Jr.
A. MASON GIBBES.

UNIVERSITY OF SOUTH CAROLINA,
Columbia, January 10, 1962.

In re docket No. 14245, deintermixture of Columbia, S.C.

Mr. NEWTON MINOW,
Chairman, The Federal Communications Commission,
New Post Office Building, Washington, D.C.

DEAR SIR: As one with many years of experience in working with news media, particularly radio and television, I wish to testify to the excellence of the work done by station WIS–TV in the handling of news from the capital city to the people of practically every community in South Carolina.

Columbia, as you know, is located almost in the exact geographical center of our State, and this has helped make it possible for WIS–TV with its present VHF channel to be a really statewide operation. I think it is true that other South Carolina stations have accepted this fact, and have realized that news originating in the offices of the many agencies, public and private, having State or regional headquarters in Columbia will be presented to South Carolinans everywhere by WIS–TV. In accepting that responsibility, the station has provided frequent news telecasts as well as other public service programs of significance to the life of South Carolina. The quality of this coverage has, in my opinion, far surpassed that of stations in other communities with which I am familiar. Trained newsmen have made it a point to see that properly documented reports on matters of public concern reach the WIS–TV audience without delay. I am rather certain that a survey would show that even in areas in which WIS–TV is not the primary station, listeners tune it in for those programs that are known to be largely devoted to news from our State capital. This is, of course, of great importance in the shaping of public opinion on many matters in this State.

The proposed deintermixture in Columbia would be highly detrimental to the interests of the South Carolina public, and would be viewed as indeed a sorry reward for an organization which has done and does so much in the cause of intelligently providing public information.

Allow me, as a newsman and a citizen, to express the hope that the Commission will not see fit to go through with this proposal.

Sincerely yours,

NICHOLAS P. MITCHELL.

The CHAIRMAN. I will say to you and the others from South Carolina, as I did to your distinguished attorney general, that Mr. Hemphill regrets that he could not be here at this time. He wanted very much to do it.

Mr. KALMBACH. Thank you. We appreciate that, and although Alabama has admitted being part of the Union, we still refer to these gentlemen as ambassadors.

Thank you.

The CHAIRMAN. Mr. Ernest W. Jennes for Champaign, Ill.

Mr. Jennes, I believe you are of Covington & Burling, for WCIA, channel 3.

Mr. JENNES. That is right, Mr. Chairman. I live in the Washington area myself. I represent the Champaign station.

Mr. SPRINGER. Mr. Chairman, may I say that Mr. Jennes is the legal representative of WCIA, channel 3, Champaign, and accompanying is Mr. August C. Meyer, the president of WCIA, and the majority stockholder.

STATEMENT OF ERNEST W. JENNES, ACCOMPANIED BY AUGUST C. MEYER AND HOWARD T. HEAD, OF CHAMPAIGN, ILL.

The CHAIRMAN. I believe the speaker of the house of representatives of Illinois was to appear also.

Mr. MEYER. In order to conserve time, Mr. Chairman, he would have merely made a summary of a lot of other evidence that we introduced and we called him and asked him to not make the trip.

The CHAIRMAN. Very well. We would have been glad to have received his statement. However, we are glad to know of his interest in this matter.

Mr. JENNES. Mr. Chairman, in view of the time problem which the committee has——

The CHAIRMAN. I observe there is another distinguished Member from the State of Illinois in the room, the minority whip of the House of Representatives, back there. We will be glad to have you come around and sit with us. I will say that he has already testified.

Mr. ARENDS. I am just visiting.

Mr. JENNES. In order to conserve the committee's time, Mr. Chairman, I would like to request that the statement on behalf of the Midwest be included in the record in its entirety. I will not read from it. There is attached to it an economic study to which the statement refers, and if it is appropriate, I would like to ask permission for it to be included in the record as well.

Mr. SPRINGER. Is it also listed?

Mr. JENNES. It is attached to the—do you have a copy of the statement alone, or of the statement together with the economic statement.

Mr. SPRINGER. Mr. Chairman, he has asked permission of you to include the economic study in the record as well as the statement. He does not wish to read his statement.

The CHAIRMAN. Mr. Jennes, your statement as requested will be included in the record, and this is——

Mr. JENNES. The economic study which is attached to it is referred to in the statement.

The CHAIRMAN. Yes. But in view of the fact that this is a document submitted to the Federal Communications Commission, we will received it for our records. I don't think it will be necessary to include it in the printed hearings but we will receive it for the files.

Mr. JENNES. That will be perfectly satisfactory.

The CHAIRMAN. You may proceed.

Mr. JENNES. Mr. Chairman, rather than to attempt to cover the number of points which are made in the statement, showing why Midwest believes that all-channel legislation should be enacted, but there should also be enacted a provision prohibiting the FCC from requiring any existing VHF station to move to the UHF, I would like to address myself to two points which have come up recurrently during this hearing which seem to me at least have not been adequately covered.

One of them is a fundamental inconsistency which I think has developed and which became very apparent this morning, and the second is a fundamental economic fallacy which has been relied upon over and over again by the proponents of deintermixture.

First, as to the fundamental inconsistency. Let me say that I will use the Champaign area as an example. Both the FCC and the television industry treat the Springfield, Ill., Decatur, Champaign, Urbana, Danville area as an area television market. Now, the FCC told you on Tuesday that its goal is effective deintermixture, that long range what it wants is a system of 12 VHF channels and 70 UHF channels operating side by side.

Now, that is precisely what exists in the area which is involved here. There are two VHF stations in Champaign-Urbana, one a commercial station, WCIA, and channel 2, and there is an educational station on the VHF in Champaign-Urbana. There are four UHF stations in the general area that I have described which is treated as a single market area, and there is also a translator.

I was interested this morning in listening to the testmony of Mr. Coe of ABC when he referred to Peoria as an illustration of the merit of deintermixture, and he talked about the expansion of the UHF since Peoria was made all UHF. What has happened in the Champaign area? Since channel 3 went on the air, two additional UHF stations and a UHF translator went on the air. The UHF station in Springfield, Ill., has increased its coverage to the point where it has the widest coverage of any UHF station in the entire State of Illinois or the entire State of Indiana, including such all UHF areas as Fort Wayne, to which the Commission referred on Tuesday, and Peoria to which the Commission referred on Tuesday, and to which Mr. Coe referred today, as illustrations of the effectiveness of having all UHF in an area. Indeed, when Mr. Coe was testifying this morning about the expansion of the UHF as he described it in Peoria, and when the gentlemen from Massachusetts, Mr. Putnam, was testifying, they didn't tell you that after the third UHF station went on the air in Peoria, a station went off the air in Bloomington, Ill., located only 32 miles away, because of the existence of the third UHF station in Peoria.

What I am saying is that the very thing that the Commission says is a goal, that is, effective intermixture, is going on in this area. Indeed, I was rather interested in some figures that Mr. Putnam placed before you this morning, not in his testimony but in a lengthy so-called economic study which he presented, and this economic study shows that the UHF station in Springfield and the UHF station in Decatur, an intermixed market, each of these UHF stations is operating more profitably than any of the UHF stations in Peoria, which is an all UHF market, which is a deintermixed market, despite the fact that Peoria has a standard metropolitan area population which is approximately twice the size of the standard metropolitan area population of either Springfield or Decatur.

I was also interested a little while ago when I heard my good friend Mark Evans talk about the Decatur station which was acquired by Metro-Media not so long ago, and he said, "WTVP is unable to compete effectively, to expand its service. WTVP has operated at a loss since commencing operations."

Now, Metro-Media acquired this station in November of 1960. They bought this station in November of 1960 and at that time they said to the FCC, based upon the experience, management, and financial resources of this company, Metropolitan—it is now Metro-Media—it is confident that it can operate successfully in Decatur and provide a superior television service which will serve the public interest in the Decatur area.

Now, there is quite an inconsistency there, and the inconsistency continues because just within the last couple of months, both the Springfield and the Decatur stations said to the FCC, and this was just a couple of months ago, that two UHF stations are operating successfully in the area, referring to the Springfield station and the Decatur station, that deintermixture of Springfield permitted substantial expansion of the services provided by these stations; that UHF channels can be successfully utilized in the area; that all of the UHF stations in this area can continue to operate and to expand their service to the public.

Now, they said this. They said this 2 months ago. They said that, with WCIA operating on channel 3 in Champaign, this would be the situation, and I stress the reference to 2 months ago because Mr. Putnam this morning suggested to you that there was some inconsistency between a statement which Dr. Stanton made and which he quoted to you out of context before the Senate—he said he said one thing over in the Senate and came over here and said something to you quite different. The statement that Dr. Stanton made which was quoted out of context was made in 1954, 8 years ago. It was made at a time when the question was, Should further VHF expansion be frozen? Should we go to an all-UHF system, and the like?

Well, 8 years have passed but only 2 months have passed since these statements were made with respect to the effectiveness of intermixture.

Now, this leads to a more fundamental problem, a more fundamental inconsistency, indeed, which has come up again during this hearing and which we find most puzzling. If the long-range goal is an effective system of 82 channels, then deintermixture runs opposite the long-range goal.

If, on the other hand, intermixture can't work in eight markets, as ABC said this morning, as Mr. Putnam said this morning, then what is going to happen if we have all-channel legislation and we have sets throughout the country that can pick up both the VHF and the UHF?

Is the argument then going to be that every VHF station will have to be shifted to UHF because intermixture can't work? The inconsistency of the position—the Commission is inconsistent also—is that they are talking about effective intermixture and yet they are seeking to deintermix and make intermixture impossible.

Now, the other question to which I would like to refer is the matter of the basic argument which underlies deintermixture. When all is said and done, it comes down to this notion of competitive equality which has been referred to. Several members of the committee raised questions this morning. Mr. Minow said on Tuesday when asked what the purpose of deintermixture was, I believe by Mr. Younger, he said we are going to put the VHF station on the same competitive basis as the UHF station. And this seems to us to involve a fundamental misconception of the economics of television.

Because of the importance of this question, WCIA retained Dr. Harold Barnett, who is one of the leading analytical economists in the country, to make a study of broadcast economics and of the economics of deintermixture, intermixture, and the rest, and he reached a number of very significant conclusions.

One of them is that the reason why a UHF station operating in the same area as a VHF station doesn't do as well as the VHF station is not because the VHF station is large but because the UHF station is small. The fact that the UHF station has a smaller service area and, hence, a smaller audience, is the reason why the UHF station doesn't do as well.

He shows further that if a station such as WCIA were shifted from the VHF to the UHF, in terms of basic economic analysis, this would not significantly benefit the UHF stations in the area and could, as one of the witnesses who testified just a few minutes ago indicated, actually harm the UHF stations in the area.

Now, third, if WCIA was shifted from the VHF to the UHF, engineering studies show that some 600,000 people would lose service. The station now serves about a million people.

Now, this sounds as if replacement service ought to be simple because 600,000 are a lot of people. But these 600,000 people reside in a doughnut-shaped area, which is made up of the difference in the coverage area of an UHF station some 40 miles and the coverage of the VHF station some 65 to 70 miles, so it is a doughnut-shaped area 25 or more miles in width going around a big circle in an area where the average population density is about 60 to 70 people per square mile, and where more than half the people live in places of less than 5,000 population.

And on the basis of very careful economic analysis, Dr. Barnett concluded that if this station were shifted from the VHF to the UHF, the net effect would be that service would be lost but that it was very unlikely, indeed improbable, that replacement stations would come into being to provide the service that would be lost.

Now, Mr. Putnam referred this morning to the greater profits which VHF stations make as compared to UHF stations, and he referred to the greater revenues that VHF stations make as compared to UHF stations. These charts come to the economic realities of television operations [referring to chart 7].

This first chart is based upon nationwide figures. These are not selective. This deals with all of the television stations in the United States, VHF and UHF, with respect to which it was possible to obtain audience information, excluding stations in the top 10 markets because if they were charted they are so big that we couldn't get them on the chart. But we have got some 428 stations and on the horizontal axis is what is commonly accepted as a very good indication of relative station audience, what is known as homes reached per average quarter hour from 6 p.m. to midnight throughout the entire week. And on the vertical axis is national spot revenue which, as you gentlemen know, is one of the principal sources of revenue of a television station.

Now, as you would expect, as the audience goes up, the revenues go up. As the audience goes down, the revenues go down.

Now, looking at this chart, the two principal UHF stations in the area served by WCIA reach homes per average quarter hour of between 20,000 and 25,000. You see, they are way down here on this chart. Now, they are no different from VHF stations which reach audiences of about the same size. This is one of the economic facts of life. A television station that has an audience of about this size achieves revenues in about this order.

WCIA is up around 68,000, which brings it up here [indicating]. Now, it is up around 68,000 because it serves a great many people whom the UHF stations in the area do not serve and could not serve and would not serve whether WCIA remained VHF or whether WCIA was shifted to UHF.

It is the fact that WCIA is a wide-area station serving this thinly populated but large area in central Illinois that provides the audience that gives it revenues comparable to stations located throughout the country with about the same audience size.

Now, what the proponents of deintermixture would have you believe is this, if you cut the size of a station like WCIA down to the size of a UHF station, by decreasing its coverage, decreasing the number of homes it serves, and hence decreasing its audience, that automatically the revenues that the VHF station has been receiving are going to be turned over to the UHF stations. This is the notion of equalizing competition.

The CHAIRMAN. 68,000 what?

Mr. JENNES. Sir, this is 68,000 homes reached per average quarter hour. It is an indication of audience. There are a great many different ones used. It comes to about—what this means is that over a period of an entire week, the average number of homes per quarter hour watching any given station are as indicated by the figures down here.

The CHAIRMAN. How many homes can be reached by that particular station?

Mr. JENNES. Oh, about a total of 330,000 homes.

The CHAIRMAN. And you are referring to 68,000 of those 300,000-odd at any average quarter hour.

Mr. JENNES. Exactly. The total number in a given night could well be two or three times this. Over a week it might be the whole 330,000. But this is an average quarter hour viewing in the 6 p.m.-to-midnight period over the entire week, and it is a pretty precise measurement of the relative audiences of different stations. And it demonstrates better than it seems to me that words can demonstrate that cutting a wide-area station down to the size of a small-area station isn't going to take the revenues that the wide-area station has and turn them over to the UHF station. The UHF stations and the VHF stations of any given audience level are going to achieve revenues which relate to that audience level.

Now, that is national revenues, gentlemen. So far as network revenues are concerned, WCIA is an affiliate of the CBS television network. The other stations in the area, two mother stations, two satellites and one translator, are affiliated with ABC or NBC, and it is perfectly obvious if WCIA were made smaller, none of the CBS revenues would go to the other stations in this market. They would go just to the other CBS affiliates in other markets. Again, cutting the larger VHF station down to the size of the smaller UHF station is not going to result in an economic benefit to the smaller station.

Now, if I may skip the next chart and shift it to chart 12–B [indicating], this translates what we have been talking about into market concepts. In the television business it is popular to talk in terms of television area markets. The FCC talked about some 250 or 260 markets throughout the country. And what is plotted on this chart are markets 10 to 200, 10 through 200.

On the left side, again the same figure, Mr. Chairman, homes reached per average quarter hour, and at each market size the actual audience of each station in the market is plotted.

Now, here is WCIA at this point and here is the Champaign-Decatur-Springfield area market. It is market No. 56 in the United States and you will notice, as follows from the chart I just referred to, here is WCIA up at about what a statistician would expect in terms of the trend of market size. It is the leading station in the market. It

is the station that makes this market market No. 56 in the country, because it has a large audience.

The two principal UHF stations in the area are all the way down here, [indicating]. There is a wide disparity in the ranks because of the fact that WCIA serves a lot of people whom the other stations don't serve and wouldn't serve. Now, Dr. Barnett concluded that if WCIA were cut down to the size of the UHF stations in the same market, the market, if it continued to exist as a market, would become instead of market No. 56, somewhere between 130 and 150 in the country.

This is just another way of demonstrating that this "share-the-wealth notion" which underlies the deep intermixture concept is economically fallacious. If this market becomes—if it shifts from 56 to somewhere between 140 and 150, it is perfectly apparent that the revenues that this market now has are going to go to markets that are larger than markets 130 to 150. That market cannot keep its own revenues when the audience of the station that created the market is no longer there.

Now, Mr. Chairman and members of the Committee, I have gone into this economic analysis because so often during these hearings the question has been raised, what are the economics of deintermixture and because of this recurrent notion of equality of competition, because of this recurrent notion that, if you take a VHF station and shift it to UHF, the consequence will be that the revenues will be turned over to the UHF stations, and I believe that these charts highlight this rather lengthy study which you have before you which demonstrates that these facts aren't so.

Now, in conclusion, Mr. Chairman, for these reasons, for the reasons which are set forth in our statement, WCIA does support all-channel legislation because it does believe that this is a way of having a most effective nationwide system of television, one utilizing both VHF and UHF. But for the very same reason, we think it imperative that there be a specific prohibition which precludes the FCC from requiring any VHF station to shift to the UHF because we think that this is tearing down rather than building up.

We appreciate the opportunity to appear hear, Mr. Chairman.

The CHAIRMAN. Thank you very much, Mr. Jennes.

Mr. Springer?

Mr. SPRINGER. There are two or three questions I would like to ask.

There is some conflict in the record as to the cost of shifting from a VHF to a UHF. Do you have any figures on that?

Mr. JENNES. We do have some figures on that. I was very surprised when I heard Mr. Putnam use the figure of $150,000 this morning. WCIA has for prudent reasons looked into this to see what the costs were. We have made a detailed study and the figures are as follows.

To shift to the UHF, assuming that the same tower that WCIA now uses were used for the UHF station so that there would be no new tower construction expense, the cost would be $453,000.

Mr. SPRINGER. Just to make the shift?

Mr. JENNES. That is right. That would cover the transmitter and the new antenna and the like; $453,000, sir.

Mr. SPRINGER. Well, that does jibe with the only figure that I have and that is when I went up to the New York experimental station and spent 2 days up there, I was told it had cost $430,000 to install. I take it what you are talking about is installation of UHF equipment. In that one they had the tower in the Empire State Building, so they didn't have to build a tower. So essentially you are covering the same ground, isn't that about right?

Mr. JENNES. This assumes that the same tower would be used as WCIA now has. So this covers the transmitter, monitoring equipment, transmitting antenna, transmission line, construction expenses and the like. Now, assuming——

Mr. SPRINGER. That is with a million watts?

Mr. JENNES. No. This is half a million watts. This is 500 kilowatts.

Now, having in mind what the Commission said on Tuesday about in Fresno when they deintermixed, they had a VHF station and a UHF station operate simultaneously to make sure there weren't holes in the service, we have looked into that also. Now, if that were done, the expense would be in excess of $700,000; $723,000.

Mr. SPRINGER. One other question, Mr. Jennes. There was some testimony, as I understood it this morning, that there would be no loss of service beyond this 40-mile range which a UHF would not serve. Now, pinning this down to Champaign, do you have any figures as to what the actual loss of service would be in the Champaign area?

Mr. JENNES. Yes, sir. And I would like to, if I may, take this both quantitatively and qualitatively. What I mean is this.

First, there are two ways of getting at the figures. In terms of engineering computations, the 40-mile grade B of a UHF station operated with a tower of about 900 to 1,000 feet and half a megawatt of power, 140,000 people who now have grade B or better service from WCIA would lose that service.

Mr. SPRINGER. A reduction from 1 to 2?

Mr. JENNES. No. That would be a reduction from 1 to zero.

Mr. SPRINGER. That is from 1 to zero. Now, what about 2 to 1?

Mr. JENNES. 237,000. And from 3 to 2, 117,000.

Mr. SPRINGER. So you are going to have a loss of service, then, to approximately half a million—approximately 400,000 people.

Mr. JENNES. Well, the total number of people losing service would be approximately 600,000.

Mr. SPRINGER. 600,000.

Mr. JENNES. It would go from 1 million down to 600,000. I mean, it would go from 1 million down to 400,000, a loss of 600,000.

Mr. SPRINGER. There would be 600,000 people that would suffer some kind of loss of service.

Mr. JENNES. That is right.

Mr. SPRINGER. And 140,000 would lose total service.

Mr. JENNES. That is right.

Mr. SPRINGER. There is one further thing. You were discussing this Springfield thing and you seemed in a conflict with Mr. Evans. I admit when Mr. Evans used those words, I was somewhat surprised, although he certainly must know his business if he has the job he does, but it was my understanding that both Plains television in Springfield and Metropolitan were now making money.

Now, I admit the statement doesn't precisely say that he could take these figures. It could have been since the day he started. He probably wasn't making any money the day he started because I remember the station as it was. It was pretty well run down when they took it over.

But it is my understanding they are now making money. I didn't attempt to go into that for fear of possibly getting into an argument, but I thought I had this reliably from somebody in the company, that Metro was making money.

Now, do you have any figures?

Mr. JENNES. Well, Mr. Springer, I have Mr. Putnam's figures. I don't have any direct information myself but Mr. Putnam——

Mr. SPRINGER. Is this on Springfield and Decatur?

Mr. JENNES. This is on Springfield and Decatur. Now, Mr. Putnam said that his organization had retained one Dallas Symthe to make a study for their organization and they for some reason picked the Champaign area as the area for their study.

And in this study Mr. Smythe said that he obtained information from the stations in the area, the UHF stations in the area, and in this study which was submitted to the committee, it shows that both the Springfield and Decatur stations are making money.

Mr. SPRINGER. That is all, Mr. Chairman.

The CHAIRMAN. Mr. Jennes, back to Mr. Springer's question, if you have a UHF station, the estimate there would be a rather large expenditure to convert, I assume, depending upon the nature of the equipment and the type of station, and so forth. I assume that it would depend upon what the cost would be.

Mr. JENNES. That is right.

The CHAIRMAN. Now, just for my information, what facilities of a UHF station could be used in connection with broadcasting over a VHF station? You could use the studio? You could use the tower?

Mr. JENNES. You could use the studio. You might or might not be able to use the tower depending on the circumstances.

You see, one problem is that often in building a VHF station, Mr. Chairman, you select a site that makes sense in terms of where the VHF signal goes, but if you shift to the UHF, you might decide that you have to build at a completely different place to have the most effective coverage. The site would have a great deal to do with it.

The CHAIRMAN. Now, what about the antenna on top?

Mr. JENNES. That would require a completely new and different antenna.

The CHAIRMAN. What about the transmitter?

Mr. JENNES. A completely new and different transmitter, and depending upon whether you were able to use the same site or not, possibly a new building. And let me just add this, if I may:

The figures that I gave were figures which would produce a television station, UHF station, which would have a wider coverage than any existing UHF station in Illinois or in Indiana. So this is a good-size station. It would only go out 40 miles and then there is left the question that Mr. Moss asked this morning, how about all the people out beyond 40 miles, and Mr. Sibal posed the same question also.

And so when you talk about cost, how many more stations are going to be necessary to fill up the areas?

This is just to convert from the V to the U, but when the conversion is finished, the UHF station's coverage is going to be something in the order of 40 percent of the VHF station, so there still is 60 percent of a geographical area which is doughnut shaped which is going to have to be served, and we figure that it would take some eight stations, each one of fairly good size, to fill up that doughnut area that would lose service.

Well, now, assume that those stations were somewhat less expensive. Of course, they would need towers; $400,000 or $500,000 per station for them. We are talking about 8 times 4, 8 times $400,000 or $500,000. And yet if they are not built, the people lose service.

The CHAIRMAN. Now, in a VHF station you have city grade service, grade A, and grade B. Do you have any such designation or type service for UHF?

Mr. JENNES. Yes, sir. The same. These are Commission standards. The city grade is a signal power which you must be able to produce in order to serve the principal city which the station is licensed to serve.

The CHAIRMAN. Does it require the same DBU signal for city grade service with UHF as it does with VHF?

Mr. JENNES. I would like to get some help on that. Mr. Head, who is our consulting engineer, is here.

Would you please——

The CHAIRMAN. You might identify yourself for the record.

Mr. HEAD. My name is Howard T. Head. I am the consulting engineer for WCIA, channel 3, in Champaign.

A signal twice as strong is required on the UHF as on the low VHF for city grade.

The CHAIRMAN. Well, now, if I remember correctly—I don't want to give the erroneous impression here, I am not an expert or an engineer, either—but it requires, I believe, 79 DBU for city grade service in UHF.

Mr. HEAD. Sir, it is 74 DBU on the low, 77 on the high, and 80 DBU on the UHF.

The CHAIRMAN. Eighty on the UHF?

Mr. HEAD. Yes, sir.

The CHAIRMAN. That is what I wanted to ask.

Thank you very much, Mr. Jennes. We appreciate your contributions to our hearings. We are glad to have your testimony.

Mr. JENNES. Thank you, sir.

(The economic report referred to will be found in the files of the committee.)

(The prepared statement of Mr. Jennes follows:)

STATEMENT ON BEHALF OF MIDWEST TELEVISION, INC.

Mr. Chairman and members of the committee, my name is Ernest W. Jennes. I am a member of the law firm of Covington & Burling. Mr. August C. Meyer, president of Midwest, and Mrs. Meyer, vice president, are here with me. Because Mr. Meyer has a serious hearing impediment, he has asked me to present the statement of WCIA, channel 3, Champaign, Ill. Also with us is Mr. Howard Head of the firm of A. D. Ring & Associates, consulting engineers to Midwest.

Midwest recognizes theat there should be room throughout the United States for further development of television over the long range and that such development must, for the most part, be in the UHF.

Midwest believes in the UHF. It has backed its belief by acquiring a UHF station in Peoria, Ill. Even in this three UHF station market the going is not easy because of the size of the market. But Midwest acquired its Peoria UHF station with its eyes open, just as it believes that any television station owner should.

The question posed by the various bills before this committee is—what kind of television system are we to have in this country?

Six of the seven members of the FCC are opposed to a nationwide all-UHF system because it would involve tremendous dislocation and because both the 12 VHF and the 70 UHF channels must be used for an appropriate nationwide system of television long range. They are also opposed to the large-scale moving of VHF stations to the UHF, because this would cause extensive displacement of existing VHF service. Midwest certainly agrees with these views. But the only difference between all-UHF and massive deintermixture to the UHF, on the one hand, and so-called selective deintermixture, on the other hand, is one of degree. "Selective deintermixture" just means selective dislocation and selective displacement of existing television service. And, as we will show, "selective deintermixture" is both a futility and an impossibility.

The FCC has said that the most serious problem in expanding UHF service into new areas—areas that are now all on principally VHF—is the fact that most television sets can only pick up the 12 VHF channels. The FCC urges that all-channel legislation will, over a period of time, accomplish a nationwide distribution of sets capable of receiving both the VHF and the UHF and that this will make possible the effective utilization of the Nation's 70 UHF channels together with the 12 VHF channels. Midwest supports all-channel legislation for this purpose, but for this purpose only.

Bills like H.R. 9267 are aimed at increasing all-channel set circulation. But such bills would make clear that the policy of the Congress in enacting such legislation would be to achieve the growth of the UHF as an integral part of a 12–VHF-70–UHF system and, as we understand the statements of the sponsors of such bills, they are intended to preclude the shift of existing VHF stations to the UHF, whether for the purpose of deintermixture, all-UHF, or otherwise.

WCIA, channel 3, Champaign, Ill., is one of the stations initially singled out by the FCC in its action of July 1961 for "selective deintermixture." I would like to make quite clear that we are not here today to plead the special case of WCIA, as such, against being shifted to the UHF. But it is appropriate to use the Champaign area situation as an illustration of why deintermixture is unsound as a matter of public policy and why legislation of the general nature of H.R. 9267 and its companion bills should be enacted.

First, some background facts.

WCIA's service area is largely one of small communities and extensive rural and farm areas. Because of its wide area VHF television service, there are approximately 1 million persons within the grade B contour of WCIA. Yet only 2 communities are as large as 50,000 in population and approximately half of the people WCIA serves live in places with a population of less than 5,000. The population density is only 69 persons per square mile.

The original allocation of channel 3 to Champaign was proposed by WCIA's owners because they recognized that an area such as this required wide area service. WCIA began operating on channel 3 in November 1953. Of the five commercial television stations located in the area WCIA serves, it is the only one owned and operated by longstanding local area residents. Indeed, it is the only such station in a large part of Illinois.

WCIA is a wide area television station not only in engineering coverage but in programing and public service. Participants in its locally created entertainment programs come from all over its area. Clergymen who appear on WCIA's religious programs are from churches throughout its area. Its farm programs—which are critical in an area with the characteristics I have described—are watched by persons throughout the entire area. Its educational programs include a college credit course with participants from more than 85 communities and 24 different counties within WCIA's service area. Its news organization of more than 50 newsmen and correspondents provide areawide news. Its weather programs are relied upon by the public throughout its area as a primary source of information of essential importance to this fertile agricultural area. Its discussion programs involve problems of areawide interest.

In one 4-month period alone public service announcements were broadcast regarding events in more than 200 communities in 28 counties WCIA serves.

The point is that WCIA is able to provide wide area public service of this scope because it is a VHF station with a wide range. If it were shifted to the UHF, many of the communities whose needs WCIA now meets would no longer be served by it and, as a matter of economics, WCIA would not be able to maintain locally originated service of the magnitude and depth it now provides.

Shifting WCIA to the UHF would, according to engineering studies, do the following:

It would take grade B or better service away from more than 600,000 people.

It would leave approximately 140,000 people without any grade B or better television service.

It would deprive more than one-quarter million people of their only choice of grade B or better television service.

Many persons who would still be served by WCIA if it operated on UHF would have to spend between $3 million and $5 millions to convert their receivers and antennas to UHF.

This is dislocation and loss of service on a massive scale. This is the price of deintermixture. Facts such as these repeated in different markets are compelling reasons why the situation cries for the establishment of a policy against deintermixture.

Let us turn to the principal theoretical justifications for "selective deintermixture." They are:

1. To strengthen UHF stations now operating in the same markets as VHF stations and to bring about new multistations UHF competition.
2. To develop and expand the UHF.
3. To create "all-UHF islands."

First, would deintermixture strengthen UHF stations operating in the same markets as VHF stations and bring about new multistation competition? Let's use the WCIA situation as a test case.

WCIA's service area includes Springfield, Ill., where a UHF station operates, Decatur, Ill., where a UHF station operates and Danville, Ill., where the Springfield station operates a UHF satellite. In addition, a UHF satellite is operated in Champaign by the Springfield station and, of course, there is an educational VHF television station in Champaign.

Two of the four UHF stations went on the air after WCIA did and the third increased its facilities and now has a wider service area than any UHF station in Illinois or Indiana, including such all-UHF cities as Peoria and Fort Wayne. Thus, there has been effective side-by-side development of UHF broadcasting in the WCIA area.

The Springfield and Decatur UHF stations told the Commission in January of this year that they "are operating successfully" and that the four UHF stations "can continue to operate and expand their service to the public." This is their language—not WCIA's

Moreover, according to figures recently submitted to the FCC by a trade association which represents some UHF stations, each of the Springfield and Decatur UHF stations is operating more profitably than any of the UHF stations in Peoria. This, despite the fact that Peoria is an all-UHF city and that the Peoria standard metropolitan area has twice the population of the Springfield standard metropolitan area and more than twice the population of the Decatur standard metropolitan area.

What then is the clamor about? Pure and simple these UHF stations seek to cut WCIA down to their size because, put their way, this will "equalize competition." Put more frankly, it is their hope that, if WCIA's service area is made small by a shift to the UHF, they will obtain the revenues WCIA loses.

The FCC's current approach to deintermixture lends support to these arguments. In a January 1962 order in the Commission's general UHF rule in making in Docket No. 14229 seeking to justify deintermixture the Commission flatly stated that it had proposed deintermixture of Champaign and seven other markets "in order to equalize competition between stations in these areas."

Here we come to the hard core of the problem—a fundamental reason why it is appropriate for the Congress to enact legislation such as H.R. 9267.

We challenge the concept that a policy of equalizing competition between stations is consistent with the congressional policy in enacting the Communications Act. But we will pass this legal question and turn to the economic question. If a VHF station such as WCIA is reduced in coverage and audience by

being made UHF, will the UHF stations serving the same area benefit by obtaining the revenues which are lost by the bobtailed former VHF station and will new UHF stations spring into being?

Because of the critical nature of this economic issue WCIA asked Dr. Harold J. Barnett, one of the Nation's leading analytical economists, to make a comprehensive study of the economic effects of shifting WCIA from channel 3 to the UHF. Dr. Barnett's study is attached to this statement and, because of its importance, we request that it be included in the record.

In selecting Dr. Barnett for this study, Midwest sought an economist of high professional qualifications and, above all, a man who would reach his own conclusions and not seek to rationalize a preconceived position.

What are Dr. Barnett's ultimate conclusions?

Basically, they are that a shift of WCIA to the UHF would not significantly benefit the UHF stations in the area, that it could harm them and, in any event, that it would result in a reduction of television service to the public and a reduction in effective competition. In economic terms, the effect would be to damage the public welfare.

How did Dr. Barnett arrive at these conclusions? His approach is a significant contribution to the economics of television broadcasting.

The starting point of the economic analysis is that a VHF station serves a much larger area than a UHF station. This is obviously a benefit to stations like WCIA and the public. But WCIA's greater size is not the reason why the UHF stations in the area do less well than WCIA. These stations do less well than WCIA because they are UHF stations and their service areas are smaller and hence their audiences are smaller.

Dr. Barnett concludes that there are really four different types of television markets which must be considered separately.

(1) The area market in which stations serving part or all of an area compete with each other for audience. All four of the UHF stations in the WCIA area do compete with WCIA for audience within the limits of their coverage. But their smaller audiences are determined by their smaller service areas, not by WCIA's larger service area.

(2) The national network sales market in which audience is sold by the network for advertising dollars. Here, the competition is among stations of the same network to be on any particular list of stations over which a network advertiser places a particular program over their network. WCIA is affiliated with CBS. WICS (Springfield) and its satellites, WCHU (Champaign) and WICD (Danville), are affiliated with NBC. WTVP (Decatur) is affiliated with ABC. There is no competition between WCIA and the other four stations for CBS network revenues.

(3) The so-called national spot sales market where WCIA is in competition with 550 television stations throughout the country for national nonnetwork advertising dollars, and not especially with the UHF stations in its area. Audience size is the single most important factor in determining station revenues from this source. WCIA's audience size gives it an advantage over all stations in the country smaller than it, but not significantly over the much smaller stations in WCIA's area.

(4) The local market in which advertising is sold to local advertisers. Here, there is only limited competition between WCIA and the four UHF stations. The Springfield UHF station has a clear advantage for local Springfield advertising. The Decatur UHF station has a clear advantage for local Decatur advertising. Local advertisers turn to WCIA if they are interested in the wide area service the other stations do not provide, cannot provide, and could not provide even if WCIA went off the air entirely.

With these four types of markets in mind, let us discuss Dr. Barnett's conclusions further.

1. There is a close relationship between the number of homes a television station can reach and the number it actually does reach. In turn, the volume of viewing audience and the time the audience spends viewing is essentially what advertisers desire and pay for (see chart 1). Thus, the UHF stations in the WCIA area are limited by their own small area coverage and not by WCIA's wide area coverage.

2. Audience is the compelling factor in determining station revenues from national spot business. This is because both volume of business and rates of national advertising increase directly with audience (see charts 5, 6, and 7).

3. Television stations with larger audiences are generally more profitable than stations with smaller audiences for two principal reasons:

(a) They have access to more national and network revenues (see chart 10).

(b) As audience increases, expenses rise significantly less rapidly than revenues (see chart 11).

4. Competition for network and national spot business is national in character. When there is a substantial difference in the audience size of stations which serve a particular area:

(a) The advantage of the station with the significantly greater audience in competing for network revenue is at the expense of other affiliates of the same network located elsewhere—not at the expense of other stations in the same area which are affiliated with other networks.

(b) The advantage of the larger station in competing for national revenues is primarily at the expense of all stations in the country—and not primarily at the expense of its smaller neighbors in the area. In other words, Dr. Barnett's study confirms that national spot advertisers buy from the top down both in terms of station audience and television market rank. To apply this to the present situation, the area served by WCIA and the four UHF stations is now 56 in rank among the 250 or so area television markets in the United States. If WCIA is shifted to the UHF, the market, if it were not destroyed entirely, would, Dr. Barnett concluded, rank between 130 and 150. The revenues lost by WCIA would not go to the UHF stations in WCIA's market. They would go to other stations in larger markets.

5. A large-audience VHF station like WCIA can be a real help to the smaller UHF stations in its area:

(a) The prominence of WCIA as a CBS affiliate attracts network advertiser interest to the area and thus leads to its small audience UHF stations in the area receiving more orders from their networks than would otherwise be the case.

(b) There is a spillover of national business because WCIA has focused national advertiser attention on the area market.

(c) There is an advantage to the smaller stations in certain local business. In markets where there are stations of substantially different coverage and audience size the small and large stations each have a competitive advantage with respect to different classes of local advertisers—the small station with respect to local advertisers who are not interested in wide-area coverage and the large station with respect to local advertisers who are interested in wide-area coverage.

6. Dr. Barnett found that the area served by WCIA and the four UHF stations has the following characteristics.

(a) The population density is thin.

(b) A sufficient portion of the area is served by enough stations located within the area to provide an effective competitive spur for WCIA and the other stations.

(c) A significant portion of the area is served by one or more VHF stations located outside the area. The deletion of WCIA, channel 3, would not create a "UHF island."

(d) A significant portion of the area receives service from WCIA alone, and thus much service would be lost entirely if channel 3 were deleted.

Dr. Barnett concluded that there is considerably more service to the public now than if all five stations were UHF.

7. Dr. Barnett points out that the economic and financial status of each of the four UHF stations is not significantly disadvantaged by WCIA. These are economic facts:

(a) The very small service areas and audiences of WCHU (Champaign) and WICD (Danville) insure that their national rates and revenues will be very small.

(b) The relatively small service areas and audiences of WICS (Springfield) and WTVP (Decatur) insure that their national rates and revenues will be relatively small.

8. It is Dr. Barnett's judgment that, if WCIA were to become a UHF station and no additional UHF stations were to arise in the area, the effect upon the revenues of the existing UHF stations would not be significant. To the extent

there were a favorable effect, it would result primarily from reduction of WCIA's competition, and the public would be losing service.

Consider these facts of 466 stations for which audience data were available: WTVP now ranks 275; WICS now ranks 287; WICD now ranks 455; WCHU now ranks 462, whereas WCIA now ranks 95. How could a shift of WCIA to UHF possibly bring about any material improvement in the national audience rank of the other stations? There is no reason to believe that a reduction in WCIA's coverage would result in the other stations' being more sought after by national advertisers—or in their obtaining more network business or higher network rates than they now obtain.

9. On the other hand, reducing WCIA's size could adversely affect UHF stations in the area. The list of television markets used by advertising agencies shows the Champaign-Springfield-Decatur-Danville area as a single television market—ranking in the top quarter of the television markets of the country. WCIA's size and prominence as the 95th largest station in audience is responsible for the very existence of this market.

If WCIA is shifted to the UHF, the national prominence which WCIA now gives the market would be lost. As stated above, the market would decline from 56 in rank to between 130 and 150 among the Nation's television markets, if it were not destroyed as an economic entity. Its importance to national advertisers—who "buy from the top down"—would be sharply diminished. National revenues now received by WTVP and WICS as a result of the importance WCIA has given the market would be lost by them (see charts 12A and 12B).

Further, the new WCIA–UHF—faced with great reductions in national and network revenues—would necessarily become a more formidable and anxious competitor for local business than it is now.

10. According to engineering estimates, about 600,000 persons now within the grade B area of WCIA would lose WCIA's service if it were shifted to the UHF. Of these, 140,000 persons would lose their only television service. And large numbers of people are dependent on WCIA for their only competitive service.

At least three new UHF stations would be required to provide a substitute service for all persons who would lose their only existing service. At least eight new stations would be required to provide a substitute service for all persons who would lose service from WCIA.

It is Dr. Barnett's judgment that there would not be sufficient population and potential audience to permit new television stations to go on air to provide substitute service for the 140,000 people who would lose their only service, let alone all 600,000 of those who would lose WCIA's service.

In short, Dr. Barnett, after months of study, was unable to find economic and statistical evidence for the view that a shift of WCIA to the UHF would strengthen the UHF stations in the area or result in new multistation UHF competition. Rather, he concludes that the result would be a reduction of television service to the public, and a reduction in effective competition.

So much, we hope, for the notion that deintermixture is a desirable policy for economic reasons.

The second theoretical justification for deintermixture is that it would develop and expand the UHF.

Would "selective deintermixture" have any significant effect on the receiver situation? Manufacturers who have not been induced to turn to a full line of all-channel sets by the existence of 100 UHF stations would not be induced to do so by the existence of 108 or 110 or 120 UHF stations. For there to be any significant impact on production there would have to be a massive shift of VHF stations to the UHF.

Indeed, how can action in 8 or 10 markets be expected to have any significant effect on the expansion and development of UHF nationwide under any theory. Television broadcasters recognize this. That is why, when the Commission came out with its general UHF proposal in July 1961, television broadcasters throughout the country were alarmed by the FCC's reference to an "expanded program of deintermixture" and by the statement that the proposed action in the eight markets "selectively" chosen in July was just a start and that the Commission "contemplated that * * * additional deintermixture proceedings will be initiated in further markets at a later time."

Let's discuss the third theoretical justification for deintermixture. Would deintermixture create "all UHF islands?" This is closely related to the point just discussed.

For WCIA this justification is not a very amusing play on words.

In 1956, WCIA was operating in Champaign and there was a VHF channel assigned but not in use in Springfield, Ill., 67 miles from WCIA. WICS, a Springfield UHF station, and WTVP, a Decatur, Ill., UHF station, urged the Commission to move the vacant UHF station away from Springfield. They both asserted that they were operating successfully and they could continue to do so so long as a VHF station were not put on the air in Springfield. They made clear that WCIA's continued existence on channel 3 would not be a barrier to their success. As a matter of fact, WICS itself stated:

"Until a method is devised by which television signals can be made to stop at designated boundary lines, no plan of selective deintermixture will be able to divide the country into simon-pure UHF areas and VHF areas. Inevitably, VHF signals will invade the UHF areas and vice versa. Fortunately, however, such simon-pure deintermixture is not required."

In 1957, the Commission deleted the VHF frequency in Springfield on the ground that this would be effective deintermixture.

The ink was hardly dry on the Commission's Springfield action when the Springfield and Decatur UHF stations were back to the Commission urging that WCIA be shifted to the UHF in order to accomplish effective deintermixture.

If WCIA were shifted to the UHF, would this create a UHF island? Well, in 1958, when the Commission twice unanimously refused to shift WCIA to the UHF, it said it would not. The Commission found that the VHF station in Terre Haute, Ind., "serves a significant portion of the area that would be served by UHF station in Champaign" and that "VHF service would continue to permeate the area and an effective UHF island would not be established."

Now in 1962 we have a new Champaign deintermixture case. The same facts exist with respect to VHF penetration from Terre Haute and, if pending applications for new and changed VHF operations in Terre Haute are granted, the penetration would be even more. Also, the committee will note that there is a UHF station in Danville, approximately 48 miles from the Terre Haute VHF station which blankets Danville and covers more than half of the area served by the Danville UHF station.

Under circumstances such as these, how can one possibly talk about "UHF islands"? If channel 3 were to be deleted from Champaign to make effective the deintermixture of Springfield, it is perfectly apparent that the proponents of deintermixture would contend that the VHF would have to be deleted from Terre Haute to make the deintermixture of Champaign and Danville effective. But there are VHF stations in Bloomington, Ind., and Indianapolis which reach or extend beyond Terre Haute and so the next argument would be that Indianapolis and Bloomington would have to be deintermixed in order to make the deintermixture of Terre Haute effective.

In other words, the "Springfield/Decatur island" becomes the "Springfield/Decatur/Champaign island" and this becomes the "Springfield/Decatur/Champaign/Danville/Terre Haute/Bloomington and Indianapolis island" and, as a matter of fact, that "island" would be subject to substantial VHF penetration from stations in Ohio, and so on it would go.

This erosion process would be repeated in the other markets which have been selected for "'initial' selective deintermixture." "Selective deintermixture" simply cannot be contained. It becomes deintermixture. Hence, we have another important reason why deintermixture poses a problem of basic national policy warranting the attention of the Congress.

Deintermixture also warrants congressional action because of the fluctuating policy of the FCC.

In 1952 the Commission established a policy of intermixture—of VHF and UHF side by side.

In 1955, the Commission instituted five "selective deintermixture" cases. In November 1955 these proceedings and petitions for "selective deintermixture" of other communities were dismissed by the Commission on the ground that "selective deintermixture" was both unfair and impracticable.

In 1956 the Commission turned toward an all-UHF system nationwide and instituted proceedings to deintermix "selectively" a number of communities.

By 1958 the Commission had turned away from deintermixture and in both 1959 and 1960 told the Congress that deintermixture was ineffective as a national policy, either on a selective or on an area basis.

In the case of Champaign, in 1958 the Commission rejected deintermixture on two occasions. Six of the present members of the Commission were members

of the Commission then and every one of them voted against the shift of WCIA from channel 3 to the UHF.

Now deintermixture is back again.

It has been suggested that legislation like H.R. 9267 should not be enacted because the Commission requires flexibility. Is this flexibility? What clearer demonstration could there be why the Congress should establish a firm policy so that the millions of people in Illinois and other States threatened by the loss and deterioration of television service will not be subject to this marching up the hill and down the hill, again and again—all rationalized in terms of "administrative expertness" and "administrative flexibility."

The CHAIRMAN. Mr. Lester W. Lindow.

Mr. Lindow, we know you have been waiting for a long time to testify. We are trying to do the best we can to accommodate people.

STATEMENT OF LESTER W. LINDOW, EXECUTIVE DIRECTOR, ASSOCIATION OF MAXIMUM SERVICE TELECASTERS, INC., ACCOMPANIED BY EDGAR F. CZARRA, JR.

Mr. LINDOW. Thank you, sir. We appreciate your patience and we will try to give you as brief a statement as possible.

We have several charts and maps with us, sir, and if I may, I would like to make use of those.

Mr. Chairman and members of the committee, my name is Lester W. Lindow. I am executive director of the Association of Maximum Service Telecasters, Inc., and with me here today is our counsel, Mr. Edgar F. Czarra, Jr., of Covington & Burling.

We are sorry indeed that time does not permit us to do more than submit our prepared statement and its attachments and to make a very brief oral summary of our views concerning the very important matters which are the subject of these hearings.

Mr. Chairman, would you be kind enough to give me a ruling as to whether or not the statement would be accepted for the record, sir?

The CHAIRMAN. Yes. Your statement, Mr. Lindow, will be included in the record.

Off the record.

(Discussion off the record.)

Mr. LINDOW. MST strongly supports the principle that every television set sold to the American public should be able to pick up every one of the 82 channels allocated for television.

Let me focus on the basic issue. Whether all-channel set legislation would advance the public interest or would be contrary to the public interest depends upon the purpose of the legislation and the use to which it is put. All-channel set legislation would advance the public interest if its purpose and use is to expand UHF television without in any way impairing existing VHF service. On the other hand, all-channel set legislation would be wholly contrary to the public interest if its purpose or use were to shift VHF television stations to UHF in whole or in part.

We believe that legislation such as H.R. 9267, the Roberts bill, and its companion bills, would, with certain language changes, meet this public interest test, but that the other pending all-channel set bills would not.

Appropriate all-channel set legislation is necessary to help develop UHF and expand commercial and educational television. Except for some setmakers, there is almost unanimous support for this point.

The key public interest question, therefore, is not whether there should be all-channel set legislation but what kind of legislation there should be.

Among the public interest reasons that MST supports legislation like the Roberts bill, H.R. 9267, is the fact that it would prohibit the FCC from shifting VHF stations to UHF. This provision unquestionably is at the heart of the matter. It is the central issue of these hearings.

In requesting the Congress to enact all-channel set legislation, the FCC has placed the basic question of television allocations policy squarely before the Congress. The issue is how to insure that the people get the maximum service the American television system can deliver. There are three approaches to consider.

One, abandon VHF, shift all existing stations to UHF, and develop television solely in the UHF.

Two, attempt to use only VHF in some sections of the country and only UHF in other sections—so-called deintermixture.

And three, develop VHF and UHF side by side throughout the country.

MST strongly favors the side-by-side approach. All-UHF and deintermixture would be unthinkable because they would cause widespread loss and disruption of service to the public and would result in a tragic waste of our nationwide television potential.

Although the FCC was strongly suggesting all-UHF last summer, for the moment at least it apparently recognizes almost unanimously that all-UHF would be unthinkable, and we certainly hope that the FCC's thinking will not change again. In this regard let me emphasize that the American people today enjoy a tremendous amount of television service even though there may be unused frequencies, and not all communities may have their own station or multiple stations. And if all operating VHF stations were to shift to the UHF tomorrow, a good deal more than 25 percent of this country would lose television service of consistently good quality because of the basic differences in coverage between the UHF and the VHF.

Thus, a sift of all television to UHF threatens both an immediate and a widespread loss of service to the public, and at the same time fails even in theory to offer any prospect for long-range growth and development.

Present service can be maintained and provision made for growth only if VHF is kept and UHF is developed.

Deintermixture would be unthinkable. At least initially deintermixture differs from all-UHF in scale. The notion of deintermixture is to shift selected VHF stations to UHF, but even selective deintermixture would result in widespread loss and disruption of service to the public as you have heard. And in point of fact, selective deintermixture is geographically impossible. It is but the beginning of erosion of VHF to all-UHF or almost all-UHF.

As to loss of service, use of the FCC's own engineering assumptions will show that deletion of just the eight VHF channels involved in the pending deintermixture cases would take a grade B service away from an area of more than 68,300 square miles. This loss is in terms of the FCC's engineering concept of grade B service. This is an area larger than all six New England States combined. It is larger than

Arkansas or Illinois or Ohio or New York or Pennsylvania or Michigan or Wisconsin or Mississippi or Alabama or North Carolina or South Carolina or Georgia or Florida. It is larger than Virginia and West Virginia combined. It is almost as large as Oklahoma. And it is more than four times as large as Maryland and New Jersey combined.

Staggering though the above figures are, they tend to understate the actual loss of service in these eight cases. They do not reflect all of the advantages of VHF and all of the disadvantages of UHF. Nor do they take into account the particular facts of each case. And it must not be forgotten that when the FCC started these eight cases, it made clear that an undisclosed number of others were to come.

Now, one of the witnesses this morning indicated that six of the seven members of the FCC have said that the eight cases were the extent of the contemplated deintermixture program. This is simply not the case. All that the six members of the Commission have said is that at the moment they are not planning all UHF. Chairman Minow's testimony before this committee on Tuesday made perfectly clear that the eight present cases did not mark the outer limits of the planned deintermixture program.

I mentioned before that selective deintermixture is geographically impossible. Selective deintermixture assumes that UHF can be used in isolated parts of the country and VHF used in remaining parts, and that never the two shall meet. But except for our new State of Hawaii, no State is an island. Television signals do not stop at State lines. We have had considerable testimony on that point.

In the nature of things, UHF and VHF overlap. Necessarily deintermixture of one place will give rise to a plea for deintermixture of a neighboring place. This is not speculation. It actually happened in 1961 when Bakersfield, Calif., was ordered deintermixed to make the earlier deintermixture of Fresno "effective."

Now, let us illustrate with some charts both the geographical impossibility and the erosive nature of selective deintermixture. On the chart areas within grade B contours of UHF stations in Connecticut and Massachusetts are in red. The grade B contour of channel 3 at Hartford is shown. The FCC has proposed that channel 3 be deleted to deintermix the area. Let us see if it does.

(Chart.) Existing VHF grade B areas are shown in black.

The CHAIRMAN. Shift that chart around a little bit so we can see it a little better.

Mr. LINDOW. The existing VHF grade B areas are shown in black. UHF grade B areas are shown in red. And they will come into evidence in a little while. They are covered over there.

If channel 3 were replaced with UHF, other VHF signals would continue to permeate the UHF area. The next argument would be to move the VHF station in New Haven, Conn., to UHF. But Providence VHF signals would still overlap the UHF contours. And it would next be argued that the Providence VHF stations should be made UHF. But Boston and New York VHF signals would still overlap UHF contours, so it would next be urged that those VHF stations be made UHF.

Next would come Albany and Manchester, and so on, in a mounting progression of instances. At some point the Connecticut River Valley

would indeed become all UHF. But look at the price the public would have to pay.

Now, what we have shown is not a condition found only in the congested Northeast. Television erosion would be just as real and just as farreaching in the wide open spaces as in New England.

(Chart.) On the second chart you see areas within grade B contours in the Illinois-Wisconsin-Iowa-Minnesota area. VHF is again in black and UHF again in red. The FCC has proposed that VHF stations in Rockford, Ill., and in Madison, Wis., be made UHF to deintermix those areas. Again other VHF signals would continue to permeate the area. By erosion Rockford and Madison would lead to Davenport-Rock Island, Chicago, and Milwaukee. Milwaukee would lead to Green Bay. Green Bay would lead to Wausau. Wausau would lead to Eau Claire. Eau Claire would lead to Minneapolis and St. Paul.

This is just erosion by the northern route. Let us take the western route. And by that route Davenport-Rock Island would lead to Cedar Rapids-Waterloo. Cedar Rapids-Waterloo would lead to Des Moines-Ames. Des Moines-Ames would lead to Rochester, Minn., to Austin, and to Mason City. And these in turn would lead to Mankato and to La Crosse.

Now, it may be said that this will not happen in these places because Fresno and Bakersfield were special cases. But let's take a look at Illinois.

In 1957 Springfield and Peoria, as you have heard several times, lost nonoperating VHF channels so that UHF areas could be created. But in 1958 the argument was made, and it is being made now, that channel 3 must come out of Champaign to make deintermixture of Peoria and Springfield effective. But Champaign would lead to Terre Haute, Ind. Terre Haute would lead to Bloomington and to Indianapolis. These would lead to Louisville and Cincinnati. And Cincinnati, of course, would be the gateway to Dayton and Columbus.

Now, you could do this exact same thing with the pending Columbia, Binghamton, Montgomery, and Erie cases which would bring their erosion, too. And this shows why, gentlemen, selective deintermixture is geographically impossible. This shows why selective deintermixture is but the first mile on the road to all UHF. This shows why selective deintermixture must be prohibited.

Legislation like the Roberts bill would be in the public interest. It would prohibit shifts of VHF stations to UHF, but would require production of all-channel receivers.

It would protect the public against the evils of all-UHF and deintermixture. At the same time, it would remove the barrier which for so long has stood in the way of lighting up more of those unused UHF channel assignments that we were watching on the board in the back of the room the other day.

It has been contended that while the all-channel aspects of legislation like the Roberts bill is in the public interest, the prohibition against shifting VHF stations to UHF is not. The argument is that prohibition ties the FCC's hands in making frequency allocations. But this "keep the FCC flexible" argument I believe breaks down under analysis.

First, legislation like the Roberts bill could be drafted to tie the FCC's hands in allocating frequencies only to the limited extent of prohibiting shifts of VHF stations to UHF. Though such a limitation on the FCC would be exceedingly important, it would be very narrow. It would neither make the FCC powerless in allocating frequencies, nor would it put the Congress in the frequency allocating business any more than the statutory prohibition against licensing aliens makes the FCC powerless in granting licenses or puts the Congress in the licensing business.

Second, there is nothing sinister or inappropriate about the Congress declaring a national allocation policy which limits by law the FCC's flexibility by prohibiting shifts of VHF stations to UHF. The FCC is but the delegate of the Congress in broadcasting matters. If the Congress is opposed to shifts from VHF to UHF, it should tell the FCC not to order such shifts, just as it has told the FCC not to license aliens. And such a law would be especially appropriate here, because when the FCC came to the Congress for all-channel set authority, it, in effect, placed the question of television allocations policy in the lap of the Congress.

Third, there is obvious need for the Congress to withhold from the FCC power to shift VHF stations to UHF. Overriding any of the usual considerations that make agency flexibility desirable, is the fundamental need of the public to be protected against all UHF or deintermixture. The public must be protected against loss of television service. The Congress should make sure that the public has this protection by law. This is especially important in view of the number of times in recent years that FCC policy toward shifts of VHF stations to UHF has changed.

May I request permission to have placed in the record AMST's comments to the FCC in FCC docket No. 14239, and in the eight deintermixture cases.

The CHAIRMAN. It may be included in the record, Mr. Lindow.

(The material referred to above follows:)

BEFORE THE FEDERAL COMMUNICATIONS COMMISSION, WASHINGTON 25, D.C.

(Docket 14239)

IN THE MATTER OF DEINTERMIXTURE OF MADISON, WISCONSIN—PETITION FOR A COMPREHENSIVE ECONOMIC STUDY OF TELEVISION DEVELOPMENT PRELIMINARY TO FCC CONSIDERATION OF ANY REALLOCATIONS ACTIONS IN MADISON AND ELSEWHERE

Television Station WISC–TV, licensed and operating on Channel 3 at Madison, Wisconsin, and party to the above-entitled deintermixture proceeding, herewith respectfully requests that—as set forth in the attached Statement of its Economics Consultant, Dr. Peter O. Steiner, Professor of Economics at the University of Wisconsin at Madison, Wisconsin—the Commission should immediately take action looking towards the making of a comprehensive economics study of television development (by itself, or by private parties or by an independent fact-finding group) so as to provide the required factual data for effective Commission consideration of any reallocations actions and policies it may contemplate.

Since the requested study would be a basic prerequisite to any meaningful Commission consideration of the pending proposal herein for deintermixture of Madison, Wisconsin, it is furthermore requested that such final consideration of this (and similar proposals) be held in abeyance pending the completion of such proposed economics study and an appropriate opportunity for parties to address comments, data, and arguments to it. Although better administrative procedures would also continue the scheduled filing of Comments in the instant

and other individual deintermixture proceedings until after the completion of the indicated economics study, no request therefor is being made herein by WISC–TV. However, the Commission may wish to consider this aspect on its own motion.

In support whereof the following is shown:

1. WISC–TV as the operating license on the frequency (Madison Channel 3) proposed to be deleted herein, has the most vital interest in this proceeding. WISC–TV believes that the Commission has unlawfully shaped this proceeding,[1] in providing it only with a limited and inadequate rulemaking opportunity to prove a negative (i.e., that Madison should not be deintermixed as proposed) where the Commission has indicated no sound or valid bases supporting its proposal. (And, indeed, until its January 19, 1962, Memorandum Opinion and Order, the Commission had not indicated any basis whatever.) In these circumstances, WISC–TV is necessarily concerned that there be herein a complete, comprehensive, and effective factual record demonstrating that Madison deintermixture would not be in (and rather contrary to) the public interest.

2. To obtain the appropriate opportunity to derive such a record, WISC–TV early filed with the Commission (on September 21, 1961) its Petition requesting that an evidentiary-adjudicatory hearing be designated on appropriate issues of law, fact, and policy for proof at trial. In such hearing, the proper placement on the Commission of the burdens of proceeding with evidence and of proof[2] would relieve in part the unlawful burden being placed on WISC–TV. But even if conducted *arguendo* in the same general form as now designated (i.e., as a rulemaking and/or with such burdens on interested party WISC–TV), the requested evidentiary hearing with its traditional adjudicatory processes, would still materially assist WISC–TV's making the indicated record on this critical matter. To date, that WISC–TV Petition is unacted upon and still pending at the Commission. So are its related requests that the Commission designate the criteria pursuant to which it will consider parties' comments and decide the question at issue (in order that Comments may properly and more effectively be directed to them), and that the Commission conduct a field study in the Madison area of technical matters relating to loss of existing service on deintermixture.

3. On November 14, 1961, WISC–TV sought certain financial data from the Commission's files to assist in its preparation for its Comments. This request was made without prejudice to WISC–TV's basic position and pending petitions, and given its recognition that such requested data was definitely secondary in nature to that more comprehensive and significant data that could be adduced upon the evidentiary hearing sought. That request was denied in full by the Commission by letter to WISC–TV counsel of December 6, 1961—because of certain restrictions of confidentiality placed thereon by the Commission "in view of the competitive nature of broadcast station operations".[3] In response thereto, a subsequent and still less meaningful WISC–TV request for certain other economic data in FCC files was submitted on December 8, 1961, supplemented on January 12, 1962. It was made subject to the same conditions and acknowledging the same limitations as previously stated. The Commission has just made available to WISC–TV the first portion of such data.

4. In its efforts to adduce the most comprehensive and meaningful record on the instant issue of Madison deintermixture, WISC–TV also sought the assistance of an expert Economics Consultant to inquire into the general and particular problems of television development seemingly raised by the Commission's rulemaking proposal. To this end, WISC–TV has retained as such expert Economics Consultant, Dr. Peter O. Steiner, Professor of Economics of the University of Wisconsin who—as his attached statement of personal qualifications will attest—is extensively qualified in the field of broadcast development as part of his overall background and experience in this and related fields of economics, economic theory and industry practices.

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[1] So stated by WISC–TV without waiver of its rights in a number of pleadings now pending before the Commission to revise or modify such designated procedures.

[2] Particularly so here, since Madison deintermixture is proposed as an *ad hoc* and arbitrary exception to the general principles of the nationwide TV allocations plan established in 1952 and still so in effect.

[3] WISC–TV believes that in ordinary circumstances the Commission might properly rely on the confidentiality of such data as filed by its licensees with it. On the other hand, the Commission commits additional legal error in conducting proceedings as these looking toward channel deletion based entirely on economic factors of TV development and operations, while at the same time so denying vitally affected parties such as WISC–TV any access to all of the most pertinent Committee data on file. Even so, when such data is most directly in point or is related to a much earlier period of time, such as Madison UHF operations in 1953–5.

5. Professor Steiner's attached Statement details the purposes of his activities on behalf of WISC–TV and his comments related to it. Summarily stated, after Dr. Steiner's discussion of the problem and its possible solution, he concludes that:

(1) A comprehensive study of television development, including its economic aspects and factors of station viability, is indispensable to any real understanding of the operations of the TV system and to any really sound, effective, and meaningful Commission reallocation actions to modify that system.

(2) No such study has apparently been made by the Commission or by anyone else for use for such purpose.

(3) No such comprehensive data is presently available publicly or can be collected by private parties or other than by the Commission, to make such a study. But the Commission on inquiry can easily and expeditiously obtain such additionally needed data which could be made available and so used as to to meet its confidentiality requirement.

(4) Such a study is well within the scope of conventional economics and analytic techniques, and can be carried out without undue time, effort, or expense, either (a) by the Commission itself, or (b) by private parties, to whom the Commission makes the data available, or (c) by an independent factfinding group[4] with FCC cooperation and provision of data.

(5) Such study should be commenced immediately, and prior to or as part of any Commission consideration of proposed reallocations actions of both a general and particular nature. This, to insure that any such actions would provide meaningful advancement to desired allocation goals rather than retarding them.

6. Given the compelling desirability throughout for such a comprehensive Commission economics study, the need for it became emergent and acute with the issuance of the Commission's Memorandum Opinion and Order of January 19, 1962. This memorandum supplemented Commission notices of proposed rule-making in general proceeding Docket 14229 and in the individual deintermixture proceedings such as Madison Docket 14239, to specify for the first time the bases upon which the Commission has purportedly reached its August 3, 1961, conclusions to pursue the policy of possible selective deintermixture in a few cities. In it the Commission for the first time indicated "equal competition" among TV stations to be the prime goal of its allocations actions, and for the first time indicated reliance on (unspecified) ARB data of audience surveys as basing its August 3 actions. Both of these asserted aspects are expressive of a Commission *economics* approach to allocations, and they also indicate its reliance upon *economic data* alone to reach basic allocations determinations. Both make absolutely necessary (even if *arguendo* it was not so previously) such a comprehensive economics study of television development as Professor Steiner proposes in the attachment.

7. Without such study, the Commission will continue to operate in a vacuum of conjecture and surmise caused by never having thoroughly studied[5] the economic aspects of such factors in their overall context. This would include, for example, as to so-called "equal competition," where (if at all) it has ever existed, and how (if at all) it may ever legitimately be achieved by government fiat, as well as the costs of any such artificially created economic status, not to speak of its basic legal and policy problems. As to the ARB data referred to by the Commission, this is as Professor Steiner asserts, only one of those "fragments of limited utility," which might well prove upon appropriate analysis to have no inherent validity whatever in such effective study and/or not be a significant ingredient of it. Clearly, however, it is inadvisable, inappropriate, and erroneous for the Commission without such study to intrude into these critical allocations matters only such piecemeal factors of the overall picture, which in addition (WISC–TV further believes) are entirely the wrong pieces. Be that as it may, given the Commission's obvious economics purpose in these deintermixture proceedings and its asserted reliance upon limited economic aspects to launch them and presumably also to decide them,[6] it is all the more incumbent upon the Com-

[4] In the nature of an "economics TASO," rather than one established (with FCC cooperation) to derive technical data.

[5] In all of these instances, WISC–TV properly assumes that the lack of any published FCC study data or indicated proceedings (beyond its annual report of aggregate revenues and profits, etc., in 3-or-more station markets), means that no such study has ever been made by it.

[6] Which, however, would be unlawful, in WISC–TV's opinion.

mission to conduct such a comprehensive economics study of overall television development as Professor Steiner outlines herein. There are at least as compelling reasons for such economics study as there are for the New York UHF experiment to test certain of UHF's technical capacities in light of the interrelated needs of overall TV development.

WHEREFORE, pursuant to the above and the attached Statement, the Commission should immediately take any and all action required for the making of a comprehensive economics study of overall television development for consideration with its review of television allocations and preliminary to or part of its consideration of any particular reallocation action.

Respectfully submitted.

SCHARFELD, SEGAL, BARON & STAMBLER,
By ARTHUR W. SCHARFELD,
ARTHUR STAMBLER,
Attorneys for Television Wisconsin, Inc. (WISC–TV).

WASHINGTON, D.C., *January 31, 1962.*

Mr. LINDOW. Thank you, Mr. Chairman. We wish to thank you and the committee for affording AMST an opportunity to participate in these hearings.

The CHAIRMAN. Thank you very much Mr. Thomson.

Mr. THOMSON. I was interested, Mr. Chairman, in the appendix C of areas which would lose grade B or better service, to find that WISC–TV, channel 3, of Madison, Wis., would be the largest number of square miles—11,135 square miles—the biggest in all of the United States.

Mr. LINDOW. Yes, sir.

Mr. THOMSON. Now, who compiled those figures?

Mr. LINDOW. These figures were compiled by our engineering consultants, and they were based on the FCC standards, engineering standards, for the VHF. On the UHF, they were based on the proposals in docket 14229, which the FCC put out in the deintermixture cases.

Mr. THOMSON. That is all.

The CHAIRMAN. Mr. Lindow, you have made a very impressive presentation. I want to thank you for it. I must say, from my own viewpoint at this time, I think your position for an all-channel receiving set program is certainly feasible and, I think, practical. I know there are some questions in the minds of some people that the proposal is contrary to our established traditions in this country. But I think we have got to consider the overall picture and the great public interest that can be served.

I have the feeling, as I told Mr. Watts, of RCA, and his engineers this morning, the ingenuity of our industry will come up with a unit or gadget if this all-channel receiver policy is established. In my opinion, it should not cost the people much more than what we are paying today, under similar conditions. I also think that your position on the promotion of and utilization of the UHF channel is a sound one. We all want to do that. The greatest difficulty I see with most everybody in this deal is that everybody wants to make as much money as the other person. Now, I do not blame them for wanting to do it.

Mr. LINDOW. That is most understandable.

The CHAIRMAN. As I said this morning, you cannot expect every department store to make all the money that Nieman-Marcus is making. I do not know anything about what Nieman-Marcus makes,

but I believe they should do pretty well with the prices they charge. But that seems to me the big difficulty in this whole thing. That makes it very, very hard for the Communications Commission and certain Members of Congress to make the proper decision on all of these matters. It seems to me it is our duty to try to give the opportunity for people who wish to use their enterprises in the development of these resources. That is what we are trying to do. I firmly believe that we will do that, if we are going to see that this valuable resource is going to be used, where much of it is now going to waste.

I am also inclined to agree with your general policy; that is, the general policy which you stated about the transfer of certain of our broadcast facilities so as to make all UHF in one locality. The chart you presented on the erosion I think could have some merit. That is the first time I have seen anything like that presented. I do know there are those who have been trying to get ahold of these VHF bands for years and years. You may have something there. I do not know. It seems to me it is possible that such a contention could be made and particularly with regard to those who insist that we go to all-UHF.

Mr. LINDOW. Yes, sir. And there is activity going on before the FCC, I believe, sir, at this very time in efforts to try and take over these channels for nonbroadcast use.

The CHAIRMAN. Well, I do not know about the present time.I know there has been from time to time. I know some that are very anxious to get it. But I do not believe the American people are going to permit it. This committee is not, if we can help it, and I think we can.

But it does worry me a little bit about hamstringing and completely tying the hands of the Commission with the strict requirements which you recommend very strongly here, with reference to the prohibition of administering the frequencies in the VHF band.

Mr. LINDOW. Well, Mr. Chairman, we feel that this restriction would be absolutely minimal.

On that point, if I may, I would like to ask Mr. Czarra, who, being a lawyer, could give you perhaps a little better understanding from a legal point of view of just how limited that restriction would be.

Mr. CZARRA. Mr. Chairman, we believe that language could be drawn to be incorporated in a bill similar to the Roberts bill which would tie the FCC's hands only to the extent that it could not shift VHF stations to UHF channels, would not interfere, for example, with the FCC's flexibility to move a VHF station from one community to another.

I believe the Enid, Okla., example has been mentioned at these hearings before. We would not contemplate language that would interfere with that. Nor would we contemplate language which would interfere the with Commission's reassignment or move of these unoperating UHF channels, or unoperating VHF channels, around the country, but only to, in effect, grandfather the existing operating VHF stations which are providing service to the public.

The CHAIRMAN. We have a great habit in this country, when somebody has been in something, and it develops that the policy which is being pursued was never intended and is not in the best interests of the public, then the way out of it is to "grandfather" them in. I think I have heard more in the last 5 years about "grandfathering" people into something when they evidently themselves must admit it

is not the right trend. They use that method of trying to get frozen in. I don't know. Maybe it is the best thing.

Mr. CZARRA. Let me hasten to say, Mr. Chairman, among the other things that the kind of language we have in mind would not interfere with would be the taking away of a license from a present operator if there was some reason or cause to take it away from him—if he were not operating in the public interest.

This is not grandfathering a license to a particular party, but rather the frequency for the community.

The CHAIRMAN. Well, I think that the allocations have generally, throughout the country, been very good. The FCC has been wrestling with changes, and they are going to have to do it. There are population shifts as conditions develop here and conditions develop elsewhere and the Commission is going to have to have some flexibility in making those adjustments when they arise. That is the reason that I believe that, as far as your industry—those that you represent—that it is not best for the general public of the country to absolutely tie the hands of the Commission, and for the Congress to get into the business of making assignments and allocating channels. I just do not think that it is the best procedure to pursue. I do think that it is the duty of Congress to set up policies, to establish the policies, and give them direction and require them to do it. That can be done.

Mr. LINDOW. We quite agree, sir, particularly when you say "require them to do it." This is exactly why we feel this has to have the force and effect of law—because of the problems we have seen over the past, where changing policy takes place at the FCC.

The CHAIRMAN. Well, in my judgment, you should give very strong consideration as to doing it in some other way than binding the hands of the Commission to deal with these matters in the public interest. How many stations do you represent; 155?

Mr. MINOW. Yes, sir; approximately that.

The CHAIRMAN. Most of those I suppose are VHF stations.

Mr. LINDOW. Most of those are VHF. We have some UHF.

The CHAIRMAN. And the thing you want, and the thing some Members of Congress want is to keep these channels in their communities. They are just as interested, and half the committee almost has testified. This is the first time that has happened in 22 years I have been here—they are all interested in it. And the industry, you are interested in it.

Mr. LINDOW. Vitally.

The CHAIRMAN. Now, I may be as wrong as I can be about it. The way I see it from what I know about it, if we try to overstep on this thing, you are not going to get anything done.

Mr. LINDOW. Well, we want to help in every possible way we can.

The CHAIRMAN. I do not know just what the situation would be, but it seems to me that since I am talking to you now, because you represent a great number of these people in this business, and you can carry the message to them—I think you better use some pretty sound judgment while we grapple with this problem. I know how easy it is for a monkeywrench to be thrown in the machinery in a matter of this kind and you won't get anything.

Mr. LINDOW. May I say, sir, since this week's hearing has been in process, I have personally heard from quite a number of our mem-

bers who have heard of the proceedings, particularly those that took place last Tuesday, when the members of the Commission were before you.

If there is one thing that they all tried very hard to convey to me, it was the fact that anything that is done in connection with this matter of deintermixture must be very effective, and it must be very firm, because they are concerned deeply.

The CHAIRMAN. In my judgment, if we try, as we are, and we do not make it, you can look out what is going to happen. The history has been made, particularly on the other side of the Capitol, a great many years ago—and part of it has been made on this side, by another committee. So I do not think it is as simple as just coming in here and saying let's get a particular kind of a bill over.

Mr. LINDOW. We would like very much to be of any assistance to the chairman and the committee that we can in that connection, sir.

The CHAIRMAN. You always have been. We want to thank you for it. We appreciate it.

Thank you very much for your presentation.

Mr. LINDOW. Thank you, sir.

(The prepared statement of Lester W. Lindow is as follows:)

STATEMENT OF LESTER W. LINDOW, EXECUTIVE DIRECTOR, ASSOCIATION OF MAXIMUM SERVICE TELECASTERS, INC.

Mr. Chairman and members of the committee, my name is Lester W. Lindow. I am executive director of the Association of Maximum Service Telecasters, Inc. With me is our counsel, Edgar F. Czarra, Jr., of Covington & Burling. We appreciate the opportunity to appear on behalf of MST to express our views concerning the very important matters which are the subject of these hearings.

First, a few words about our association. MST's membership includes more than 150 small, medium, and large television stations located in all parts of the country. To be eligible for membership a station must operate with the maximum power permitted by the rules of the FCC. No station owned by a network may be a member. Educational and UHF stations may be and are members.

Since its establishment in 1956, MST has consistently followed policies designed to assure a nationwide television system that will provide the American people with maximum television service. Our testimony today is from this overall viewpoint. I want to emphasize that MST is not trying to carry the burden for any individual member—including those directly affected by the eight deintermixture proposals which are being discussed in these hearings.

To our knowledge no group has worked as hard and as long as MST to assure that every television set sold to the American public can pick up every one of the 82 channels allocated for television. As far back as 1957, MST urged that all-channel sets be freed of manufacturers' excise tax so that they could be priced competitively with VHF-only sets. And since 1959 MST has vigorously supported legislation to require that only television sets able to receive both the 12 VHF channels and the 70 UHF channels could be shipped in interstate commerce. Moreover, on more than one occasion, MST has been the principal party supporting action to save the 70 UHF channels for television and to foster UHF development.

MST strongly supports the all-channel set principle embodied in a number of bills pending before the committee, including H.R. 8031, introduced by Chairman Harris at the request of the Federal Communications Commission, H.R. 9267, introduced by Mr. Roberts, and its companion bills introduced by Messrs. Moss, Hemphill, Anderson, Riley, Scherer, and Steed, and in H.R. 10328 introduced by Mr. O'Neill. However, our strong view is that legislation such as the Roberts bill and its companion bills should be enacted rather than the Commission bill and other bills for several very important public interest reasons. But let no one seek to cast doubt about MSTS's strong support of the

principle that all television sets should be able to receive all 82 television channels.

The bills which are the subject of these hearings cannot be evaluated in the abstract so let me focus on the basic issue. Whether all-channel set legislation would advance the public interest or would be contrary to the public interest depends upon the purpose of the legislation and the use to which it is put. All-channel set legislation would advance the public interest if its purpose and use is to expand UHF television without in any way impairing existing VHF television service. On the other hand, all-channel set legislation would be wholly contrary to the public interest if its purpose or use were to shift VHF television stations to UHF, in whole or in part. We believe that legislation such as the Roberts bill and its companion bills meet this public interest test, but that the other pending all-channel set bills do not.

Appropriate all-channel set legislation is necessary to develop UHF and expand commercial and educational television.—In 1952 the FCC made about three times as many UHF channel assignments as VHF channel assignments. Yet of all television sets produced since then less than 13 percent have been equipped to receive UHF. UHF set production has fallen sharply over the years. In 1961 UHF sets made up only 6 percent of total production. Appendix A charts the yearly decline.

Unless the public has sets that can receive UHF as well as VHF, prospective commercial and educational UHF stations will not be able to reach the audiences necessary for effective operation and UHF stations will be deterred from coming into being. Yet, without UHF stations in operation, the public lacks incentive to buy sets to receive both UHF and VHF especially when a 12-channel VHF set can be bought for a little less. Until this ring is broken and the public has sufficient numbers of all-channel sets, the ordinary development of commercial and educational UHF television will remain impeded.

For 10 years the ring has not been broken by any technique. All other feasible approaches have been unproductive, it is apparent that the time has come for the Congress to enact appropriate all-channel set legislation to break the ring so that UHF can be developed in the public interest.

Except for some setmakers there is almost unanimous support for the principle of all-channel set legislation. The FCC is for it. The three networks are for it. The NAB is for it. UHF stations are for it. VHF stations are for it. Farm and other groups are for it. MST is for it. And judging from their bills and statements, a substantial number of Senators and Members of the House of Representatives are for it.

Some setmakers are against all-channel set legislation for these stated reasons. First, they doubt that all-channel set legislation would be effective to bring about development of UHF. In this they stand alone. Second, they suggest that promotional efforts or further study could create more demand for all-channel sets and that this demand would be followed by production of all-channel sets. In this they ignore history. This approach has failed miserably for 10 years, with all-channel set production lower last year than ever before. Third, they suggest that the FCC create more demand for all-channel sets by a program of deintermixture or all UHF and that all-channel set production would follow to meet the demand. In this they close their eyes to two facts. All UHF would be unthinkable. Deintermixture would not significantly spur all-channel set production. Fourth, they object that language in the Commission bill is so broad that the FCC could establish standards for sets far beyond those relating to all-channel reception. In this, their point is well taken. But the problem can be cured by tighter drafting, such as in the Roberts bill, and the FCC has made clear that it favors tighter drafting. Fifth, they are concerned about the Congress interfering with the free play of market forces. In this they overlook the fact that some problems require congressional action—not free market forces—for solution in the public interest. All-channel set production is such a problem. Free market forces have failed to solve it during a decade of trial. For the Congress to act under these compelling circumstances would not be novel.

Let me anticipate two other points. (1) We believe with the FCC that appropriate all-channel set legislation would be constitutional; (2) we doubt that a small across-the-board increase in the price of all television sets resulting from an all-channel requirement would deter the sale of sets generally, any more than rising costs for other necessities have deterred their sale.

The key public interest question therefore is not whether there should be all-channel set legislation, but what kind of legislation there should be.—MST supports legislation like the Roberts bill, H.R. 9267, for three important reasons.

First, all television sets imported or shipped in interstate commerce should be able to receive all 82 television channels, including present VHF channels 2 to 13. This is the power the FCC says it seeks. The legislation should expressly state that this is the power conferred. Section 2 of H.R. 9267 is express on the point, whereas H.R. 8031 is silent.

Second, all-channel set legislation should give the FCC only that power necessary to assure production of all-channel sets. H.R. 9267 is carefully limited in that regard. H.R. 8031 is far too broad and would give the FCC power over sets that could rightly concern setmakers. They fear they could be told, for example, that all sets must be portable, or must work on both a.c. and d.c. current, or must have tinted picture tubes, or must use transistors instead of tubes, and so on. The FCC has emphasized its willingness to have the legislation narrowly define its power over sets. This should be done as in H.R. 9267.

Third, all-channel set legislation should prohibit the FCC from shifting VHF stations to UHF whether by case-to-case deintermixture to UHF, or by wholesale shifts of all or substantial numbers of stations to UHF, or otherwise. And this provision unquestionably is at the heart of the matter and is the central issue of these hearings.

In requesting the Congress to enact set legislation, the FCC has placed the basic question of television allocations squarely before the Congress. The issue is how to insure that the people get the maximum service the American television system can deliver. There are three approaches to consider. (1) Abandon VHF, shift all existing stations to UHF, and develop television solely in UHF; (2) attempt to use only VHF in some sections of the country and only UHF in other sections—so-called deintermixture; (3) develop VHF and UHF side by side throughout the country. MST strongly favors the side-by-side approach. Either of the other two approaches would result in a tragic waste of our nationwide television potential.

All-UHF would be unthinkable.—I will not dwell here on the tragic consequences for the public if all television were shifted to UHF. Although the FCC was strongly suggesting all UHF last summer, it now apparently recognizes, almost unanimously, that all UHF would be unthinkable. We hope the FCC's thinking will not change again. However, let me emphasize three points.

One, although our country is very large and a third of our people live in rural and outlying areas, and although television stations are expensive to construct and operate, the American people today enjoy a tremendous amount of television service. Ninety-nine percent of the people of the United States live within range of at least one television station. Of all homes in the United States 90 percent have television sets. Ninety-eight percent of all television homes can choose between at least two television stations. Ninety-four percent of all television homes can choose among at least three television stations. The average television home can choose among at least five television stations. Thus, while there may be unused frequencies and not all communities may have their own station or multiple stations, it is evident that the people have a lot of television service. It is essential that bright and blinking lights representing unused channel assignments not blind you to the fact that a tremendous amount of television service lights up the television screens of scores of millions of Americans throughout every day of the year.

Two, if all operating VHF stations were to shift to UHF tomorrow, a good deal more than 25 percent of this country would lose television service of consistently good quality because of the basic differences in coverage between UHF and VHF. This is shown in appendix B. Even full utilization of 70 UHF channels—2,000 or more stations—would not provide more service to the public than the present 12 VHF channels with some 500 stations. Thus, shift of all television to UHF threatens both an immediate and widespread loss of service to the public and, at the same time fails, even in theory, to offer any prospect for long-range growth and development. Present service can be maintained and provision made for growth only if VHF is kept and UHF developed.

Three, the notion of all UHF should be rejected by the Congress once and for all. The past 6 or 7 years have seen the Commission periodically raise and

lower the threat of all UHF. It raised it in 1955 and 1956. It lowered it in 1959 and 1960. It raised it again 1st July. It apparently has lowered it again now. But all UHF is so lacking in merit, and is so contrary to the public interest, that the Congress should make clear that it is not to be raised again. Legislation like the Roberts bill would do this.

Deintermixture would be unthinkable.—At least initially, deintermixture differs from all UHF in scale. The notion of deintermixture is to shift selected VHF stations to UHF. But even selective deintermixture would result in widespread loss and disruption of service to the public. And in point of fact selective deintermixture is geographically impossible and is but the beginning of erosion of VHF to all UHF or almost all UHF.

Advocates of deintermixture often speak of it as a tool to handle specific situations. The implication is that there are not serious consequences for the public, or at least that these consequences are not widespread, because only a selected number are involved. But the facts are otherwise. For example, if the FCC's own engineering assumptions are used, it will be seen that deletion of just the eight VHF channels involved in the pending deintermixture cases would take a grade B service away from an area of more than 68,300 square miles. The details are shown in appendix C. Note the size of this area losing service. It is larger than all six New England States combined. It is larger than Arkansas, or Illinois, or Ohio, or New York, or Pennsylvania, or Michigan, or Wisconsin, or Mississippi, or Alabama, or North Carolina, or South Carolina or Georgia, or Florida. It is larger than Virginia and West Virginia combined. It is almost as large as Oklahoma. It is more than four times as large as Maryland and New Jersey combined. The losses would affect 13 different States as shown in appendix D. Farm, rural, and smalltown viewers would be hurt especially.

This is very widespread loss indeed. It cannot be squared with a notion of selective or limited. But even this is not the whole story of these eight cases. Again using the FCC's engineering assumptions, more than 8,600 square miles would be left without any grade B service. These white areas would be larger than Massachusetts, or New Jersey. They would be larger than Connecticut, Delaware and Rhode Island combined.

Staggering though the above figures are, they tend to understate the actual loss of service in these eight cases. They do not reflect all of the advantages of VHF and all of the disadvantages of UHF. Nor do they take into account the particular facts of each case. And it must not be forgotten that when the FCC started these eight cases it made clear that an undisclosed number of others were to come.

Why would deintermixture cause huge loss and disruption of service to the public? In a nutshell, it is because UHF signals do not go out as far as VHF signals, as shown by appendix E, and because UHF signals are cut off or weakened by trees, hills, mountains, buildings, and other obstructions far more than VHF signals. Most significant differences between UHF and VHF are basic in nature. They may not be expected to be eliminated by changes or improvements in the state of the art. Technological advance may minimize some disparity between VHF and UHF and some of the often overlooked disparity between upper UHF and lower UHF. But the significant differences are accounted for by natural phenomena which engineering experts do not believe will be altered by technological advance.

We said before that selective deintermixture is geographically impossible. Selective deintermixture assumes that UHF can be used in isolated parts of the country and VHF used in remaining parts and never the two shall meet. But except for Hawaii no State is an island. Television signals do not stop at State lines. In the nature of things UHF and VHF would overlap. Necessarily deintermixture of one place will give rise to a plea for deintermixture of a neighboring place. This is not speculation. It actually happened in 1961 when Bakersfield was ordered deintermixed to make the earlier deintermixture of Fresno effective.

Let us illustrate with some charts both the geographical impossibility and the erosive nature of selective deintermixture. On the chart areas within UHF grade B contours in Connecticut and Massachusetts are in red. The grade B contour of channel 3 at Hartford is shown. The FCC has proposed that channel

3 be deleted to deintermix the area. Let's see if it does. Existing VHF grade B areas are shown in black. UHF grade B areas are shown in red. If channel 3 were replaced with UHF, other VHF signals would continue to permeate the UHF area. The next argument would be to move the VHF station in New Haven to UHF. But Providence VHF signals would still overlap the UHF contours, and it would next be argued that Providence VHF stations be made UHF. But Boston and New York VHF signals would still overlap UHF contours so it would next be urged that those VHF stations be made UHF. Next would come Albany and Manchester and so on in a mounting progression of instances. At some point, the Connecticut River Valley would indeed become all UHF. But look at the price the public would have to pay.

What we have shown is not a condition found only in the congested Northeast. Television erosion would be just as real and just as far reaching in the wide open spaces as in New England.

On the second chart you see areas within grade B contours in the Illinois-Wisconsin-Iowa-Minnesota area. VHF is in black. UHF is in red. The FCC has proposed that VHF stations in Rockford and Madison be made UHF to deintermix those areas. Again, other VHF signals would continue to permeate the area. By erosion, Rockford and Madison would lead to Davenport-Rock Island, Chicago, and Milwaukee. Milwaukee would lead to Green Bay. Green Bay would lead to Wausau. Wausau would lead to Eau Claire. Eau Claire would lead to Minneapolis-St. Paul. But that is only erosion by the northern route. By the western route, Davenport-Rock Island would lead to Cedar Rapids-Waterloo. Cedar Rapids-Waterloo would lead to Des Moines-Ames. Des Moines-Ames would lead to Rochester, to Austin and to Mason City. These would lead to Mankato and to La Crosse.

It may be said that this will not happen in these places because Fresno and Bakersfield were special cases. But look at Illinois. In 1957 Springfield and Peoria lost nonoperating VHF channels so that UHF areas could be created. But in 1958 the argument was made, and it is being made now, that channel 3 must come out of Champaign to make deintermixture of Peoria and Springfield effective. But Champaign would lead to Terre Haute. Terre Haute would lead to Bloomington and Indianapolis. These would lead to Louisville and Cincinnati Cincinnati would be the gateway to Dayton and Columbus. The pending Columbia, Binghamton, Montgomery, and Erie cases would begin erosion, too.

This shows why "selective" deintermixture is geographically impossible. This shows why "selective" deintermixture is but the first mile on the road to all-UHF. This shows why "selective" deintermixture must be prohibited. This shows why legislation like the Roberts bill should be enacted.

UHF and VHF side by side is sound allocations policy.—The only way to develop the television potential of this country so as to provide maximum service to the American people is to develop UHF side by side with VHF. The public has everything to gain and nothing to lose from this approach. It stands to gain all additional commercial and educational service that can be had through full utilization of UHF. Yet it would not lose any existing service—VHF or UHF. In particular, people in rural, outlying and suburban areas who must rely on the wide-area service provided by VHF would be relieved of the threat of impairment or destruction of their television service. Some have said that side by side would not work. But in candor they must admit that they have no basis for this assertion because widespread distribution of all-channel sets so far has not existed. And they must admit, too, that there are places today where there is substantial all-channel set distribution where VHF–UHF side-by-side operation is successful.

Legislation like the Roberts bill would be in the public interest. It would prohibit shifts of VHF stations to UHF, but would require production of all-channel receivers. It would protect the public against the evils of all-UHF and deintermixture. At the same time it would remove the barrier which for so long has stood in the way of lighting up more UHF channel assignments.

It has been contended that while the all-channel set aspects of legislation like the Roberts bill is in the public interest, the prohibition against shifting VHF stations to UHF is not. The argument is that the prohibition ties the FCC's hands in making frequency allocations. But this "keep the FCC flexible" argument breaks down under analysis.

First, legislation like the Roberts bill would tie the FCC's hands in allocating frequencies only to the limited extent of prohibiting shifts of VHF stations to UHF. Stations could still be shifted from one VHF channel to another VHF channel, or from one UHF channel to another UHF channel, or from UHF to VHF. VHF and UHF licenses could still be taken away from particular parties for cause. VHF station location and city of license could still be changed, as could UHF station location and city of license. New VHF and new UHF channel assignments could still be made. Though the limitation on the FCC would be exceedingly important, it would be very narrow. It would neither make the FCC powerless in allocating frequencies nor put the Congress in the frequency allocating business any more than the statutory prohibition against licensing aliens makes the FCC powerless in granting licenses or puts the Congress in the licensing business.

Second, there is nothing sinister or inappropriate about the Congress declaring a national allocations policy which limits the FCC's flexibility by prohibiting shifts of VHF stations to UHF. The FCC is but the delegate of the Congress in broadcasting matters. Whatever power the FCC has, it has received from the Congress. If the Congress is opposed to shifts from VHF to UHF it is to be expected that it will tell the FCC not to order such shifts. This is no different than the Congress telling the FCC not to license aliens. And a declaration of policy by the Congress is especially appropriate here because when the FCC came to the Congress for all-channel set authority it, in effect, placed the question of television allocations policy in the lap of the Congress.

Third, there is obvious need for the Congress to withhold from the FCC power to shift VHF stations to UHF. Overriding any of the usual considerations that make agency flexibility desirable, is the fundamental need of the public to be protected against all-UHF or deintermixture. The public must be protected against loss of television service. The Congress should make sure that the public has this protection by law. This is especially important in view of the number of times in recent years that FCC policy toward shifts of VHF stations to UHF has changed.

And now to summarize.

MST vigorously supports legislation that will assure that every television set sold in this country is a complete 82-channel set.

MST vigorously supports development of UHF television in a manner which assures more service for the people, not less service. Therefore MST vigorously supports a national television allocations policy that prevents shifts of VHF stations to UHF, but fosters development of UHF side by side with VHF.

Accordingly, MST urges enactment of legislation like the Roberts bill, H.R. 9287, and its companion bills.

We wish to thank the committee for affording MST an opportunity to participate in these hearings. If you have any questions, Mr. Czarra and I would be happy to try to answer them. Thank you.

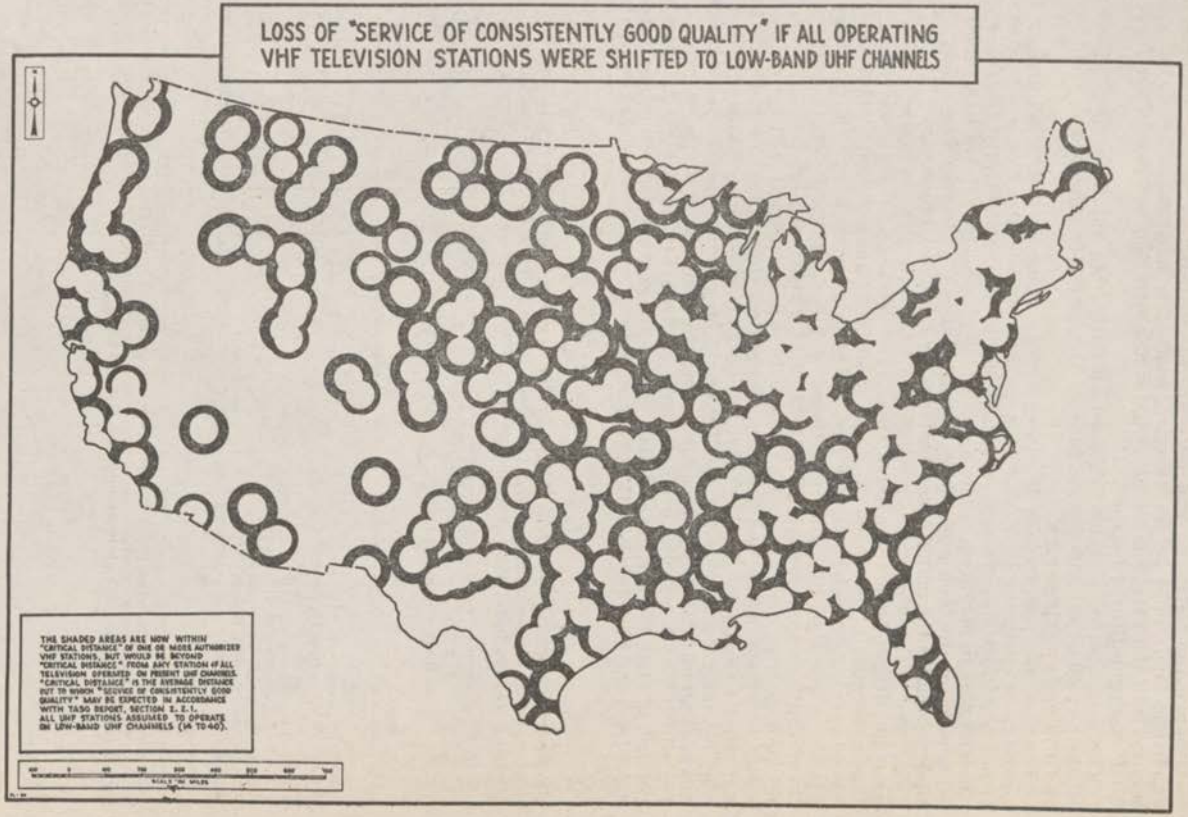
APPENDIX A

UHF receiver production has been declining continuously since 1953

Year	Total television receiver production	UHF television receiver production	Percentage with UHF tuners
1953	7,216,000	1,459,500	20.2
1954	7,347,000	1,383,500	18.8
1955	7,757,000	1,181,800	15.2
1956	7,387,000	1,035,200	14.0
1957	6,399,000	779,800	12.2
1958	4,920,000	418,300	8.5
1959	6,349,000	435,600	6.9
1960	5,708,000	428,500	7.5
1961	6,177,797	370,977	6.0

Source: TV Factbook No. 32, p. 24, for 1953-60; 1961 figures from Television Digest, Feb. 19, 1962, p. 9.

APPENDIX B


LOSS OF "SERVICE OF CONSISTENTLY GOOD QUALITY" IF ALL OPERATING VHF TELEVISION STATIONS WERE SHIFTED TO LOW-BAND UHF CHANNELS
THE SHADED AREAS ARE NOW WITHIN "CRITICAL DISTANCE" OF ONE OR MORE AUTHORIZED VHF STATIONS, BUT WOULD BE BEYOND "CRITICAL DISTANCE" FROM ANY STATION IF ALL TELEVISION OPERATED ON PRESENT UHF CHANNELS. "CRITICAL DISTANCE" IS THE AVERAGE DISTANCE OUT TO WHICH "SERVICE OF CONSISTENTLY GOOD QUALITY" MAY BE EXPECTED IN ACCORDANCE WITH TASO REPORT, SECTION 2. 2.1. ALL UHF STATIONS ASSUMED TO OPERATE ON LOW-BAND UHF CHANNELS (14 TO 40).

APPENDIX B

LOSS OF "SERVICE OF CONSISTENTLY GOOD QUALITY" IF THE UHF WERE SUBSTITUTED FOR THE VHF

Although the UHF can and does provide satisfactory service under certain conditions and could be an effective part of a nationwide television system alongside of the VHF, the public would suffer a tremendous loss of service if the UHF were substituted for the VHF.

The attached map, which is based on data from the Television Allocations Study Organization, gives some idea of the loss of service which would occur in rural and outlying areas.

The shaded areas are now receiving service of consistently good quality from one or more operating VHF television stations but would not receive such service if a low band UHF channel (channels 14–40) were substituted for every VHF channel now in operation. The areas which would lose service total more than 25 percent of the land area of the United States. This map very substantially underestimates the actual loss of service for a number of reasons. TASO found that, even within the areas in which the UHF provides service of consistently good quality, it is more variable than VHF service and, on the average, it is poorer because of problems of signal absorption and terrain. These problems would result in impaired service both in the large cities where the great masses of our population live and also in many other parts of the country which theoretically would receive UHF service of consistently good quality. TASO also found that normally the VHF provides a substantial volume of good or satisfactory service beyond the distances indicated on this map whereas this is not true of the UHF. Furthermore, because of practical drafting problems the map assumes that each UHF facility would operate on channels 14 through 40 whereas an all-UHF allocations plan would certainly have to use channels 41–83 for which TASO reported a consistently good quality service range of only 75 percent of that for the lower UHF. Thus, the service that would be lost by a shift from the VHF to the UHF is very substantially underestimated on this map.

APPENDIX C

Areas which would lose grade B or better service, and white areas which would be created, if operating VHF stations were shifted to UHF channels as proposed in dockets Nos. 14239–14246

Station proposed by FCC for shift to UHF	Areas losing a grade B or better service [1]	White areas [1]
	Square miles	*Square miles*
WICS–TV, channel 3, Madison	11,135	2,050
WREX–TV, channel 13, Rockford	5,115	260
WTIC–TV, channel 3, Hartford	8,830	----
WICU–TV, channel 12, Erie	3,820	705
WNBF–TV, channel 12, Binghamton	8,625	480
WCIA, channel 3, Champaign	10,695	3,740
WIS–TV, channel 10, Columbia	11,060	----
WSFA–TV, channel 12, Montgomery	9,025	1,440
Total	68,305	8,675

[1] These figures are based on grade B contours calculated on the basis of engineering assumptions stated by the FCC in these cases. Actual losses of service and actual white areas are probably greater when factors such as terrain, etc., are taken into account in individual cases.

APPENDIX D

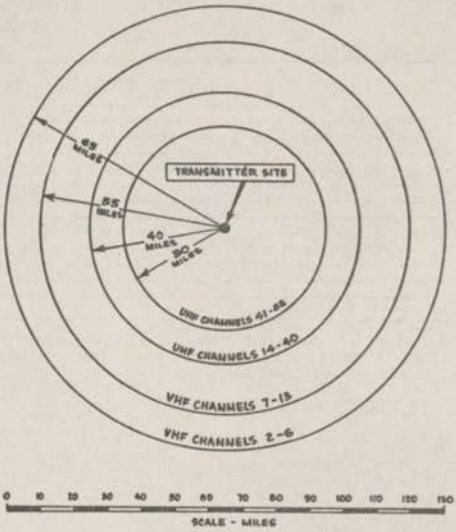
States which would lose a grade B or better service and States that would have white area if there were deintermixture as proposed in dockets Nos. 14239–14246

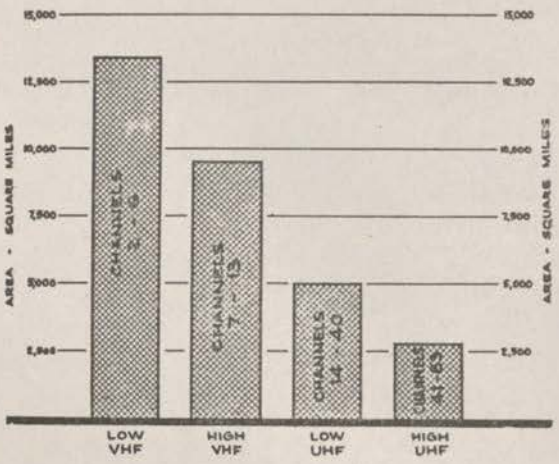
State	Areas losing a grade B or better service [1]	White areas [1]
	Square miles	*Square miles*
Alabama	9,025	1,440
Connecticut	1,720	
Illinois	14,970	3,860
Indiana	1,310	140
Iowa	120	
Massachusetts	2,960	
New York	9,465	180
North Carolina	925	
Ohio	745	
Pennsylvania	5,795	1,005
Rhode Island	590	
South Carolina	10,135	
Wisconsin	10,545	2,050

[1] These figures are based on grade B contours calculated on the basis of engineering assumptions stated by the FCC in these cases. Actual losses of service and actual white areas are probably greater when factors such as terrain, etc., are taken into account in individual cases.

APPENDIX E

COMPARATIVE AREAS PROVIDED "SERVICE OF CONSISTENTLY GOOD QUALITY" BY DIFFERENT CHANNELS





SOURCE:
TASO REPORT, SECTION 2.2.1,
TABLE OF AVERAGE
CRITICAL DISTANCES

RD

The CHAIRMAN. The next witness we will call will be Mr. Lawrence Rogers, Taft Broadcasting Co., Cincinnati and Columbus, Ohio.

We are glad to have our colleague from Ohio, Mr. Harsha, who is here with Mr. Rogers, for whatever comments he desires to make.

We are sorry to have delayed you, but we are doing the best we can here.

STATEMENT OF HON. WILLIAM H. HARSHA, JR., A REPRESENTATIVE IN CONGRESS FROM THE SIXTH CONGRESSIONAL DISTRICT OF THE STATE OF OHIO

Mr. HARSHA. Thank you very much, Mr. Chairman. I want to thank you particularly, Mr. Chairman, and members of this distinguished committee, for receiving us at this time.

I have the particular honor and privilege of introducing to you a very capable young man, Mr. Lawrence H. Rogers II, executive vice president of Taft Broadcasting Co.

Taft Broadcasting Co. operates some of the finest radio and television stations in Ohio, Kentucky, and Alabama, and I deeply appreciate—and I know Mr. Rogers does, and I know the Taft Broadcasting Co. appreciates— the opportunity you have afforded them to present their views on this very important legislation here.

Not only is Mr. Rogers an expert in his field, but because of his integrity, he enjoys the deepest respect among his associates and citizens in the Greater Cincinnati area, where he resides.

I am sure you will find his presentation worthy of your very deep consideration.

Thank you very much.

The CHAIRMAN. May I say to our colleague, we are very glad to have you here before the committee, expressing your interest in this, as you do on all occasions when there is a great deal of public interest and concern, and particularly when it affects your area, as well as the entire country.

Mr. HARSHA. Thank you very much.

STATEMENT OF LAWRENCE H. ROGERS II, EXECUTIVE VICE PRESIDENT, TAFT BROADCASTING CO., CINCINNATI, OHIO; ACCOMPANIED BY WILLIAM H. HANSHER, VICE PRESIDENT IN CHARGE OF ENGINEERING, TAFT BROADCASTING CO.

Mr. ROGERS. Mr. Chairman, I have with me Mr. William H. Hansher, vice president in charge of engineering of Taft Broadcasting Co., in the event that there are any technical questions.

We had prepared a rather lengthy and elaborate illustrated slide presentation which at this hour of the day I am happy to advise you we would not attempt to present. But we would appreciate it very much if it and the attendant material were included in the record.

The CHAIRMAN. Mr. Rogers, we will be glad to receive your statement and let it be included in the record. I observe that you have a number of charts. There may be some difficulty because of the printing problems of including them. But they will be received and we will do the best we can. Certainly they could not be included in color.

Mr. ROGERS. I understand, sir. Thank you.

The CHAIRMAN. We will see what we can do about them—if we can use them without the color phase of it, no doubt they will be included.

Mr. ROGERS. Thank you, sir.

I will attempt to present a very brief condensation, instead of our presentation, and to make a few comments along the way, about the testimony to date.

Essentially, we support the proposed legislation of Congressman Roberts of Alabama and our Congressman Scherer, H.R. 9267, and the various companion bills. We endorse the notion of granting the FCC enough regulatory authority over television receivers to require future sets to receive both VHF and UHF, so long as this is not used to further any doctrine which results in the loss of existing television service.

It is our feeling that H.R. 8031 as requested by the FCC falls short of this requirement, in that it fails to limit the Commission's authority in shifting channels from the VHF to the UHF, which has had so much discussion.

As Congressman Roberts himself had indicated in earlier testimony, there may be language changes needed in these bills, and perhaps we have not settled the question properly of an approach to this injunction. In this we are also agreed. But essentially the Roberts bill and companion bills answer what we feel should be the basic requirements.

First of all, to protect the public stake in presently existing commercial and educational television operations.

Secondly, to accomplish this without impairing the Commission's authority to decide on the qualifications of licensees.

Thirdly, to permit the regulation of receivers to such limited extent that they are required to have joint VHF–UHF reception capabilities.

And finally, to prevent the Commission's use of such all-channel sets as a stepping stone to deintermixture leading ultimately to an all-UHF service, which Mr. Lindow and our MST organization has so capably presented.

Now, as to the why of our testimony.

We are in substantial agreement that UHF television must exist along with VHF to provide the broadest possible national service. We believe all channel sets will help to pave the way for such a development. But we are unalterably opposed to the deletion of any existing television service in order to attain these ends.

I might add at this point that we are rather gratified that during these hearings Chairman Minow apparently has modified his position, and several of the Commission have modified their position, with regard to an all-UHF service. What remains to be done in our opinion, and what our formal presentation was designed to explore, is for the Congress to preclude any action by the Commission that will destroy any existing service on the assumption that some new or highly theoretical substitute can be caused to rush into the vacuum which has been created. To attempt such a planned development, using this method, before it is either technically or economically feasible, would in our view cause grave damage to the public interest.

Basically, as we have heard over and over, UHF is an inferior technical service to VHF. We have some knowledge in this matter, having operated such a station in Lexington, Ky., for 3 years, and

it has yet to become profitable, despite Chairman Minow's flattering indication the other day that Lexington is among the successful UHF markets.

This is the whole trouble with this perennial debate we are in on the subject of television allocations. We seem entirely too much concerned in our view with the fates and fortunes of operators and networks, particularly the latter, and too little concerned with the nature and extent of the service being provided.

I really believe this is a most important aspect of the entire controversy. The crux of it is that the competitive abilities of individuals is being given ofttimes more importance in determining public policy than the actual existence of what is a fantastically successful communications system, developed over an incredibly short time.

Of the priority needs listed in the Commission's own "Sixth Report," which is the basis for all these allocations, multiple services in each community ranks fifth out of a list of five priorities. The first is some kind of service to all areas, which now is something like 99 percent of the entire United States, and 92 percent of all the homes in the United States. Second is a service with local self-expression. Third is a choice of service in each area.

And incidentally, something like 95 percent, of almost 50 million sets in the country have such choice now.

Fourth is local competitive service.

And the fifth and last is whatever is left, which is what we are arguing about, namely, multiple services everywhere.

We believe it would be a tragic mistake to destroy the No. 1 priority in a hasty and ill-conceived quest for No. 5, which really amounts to sacrificing the most critical allocation priority in order to achieve the least important.

Now, why is UHF inferior technically? You have heard so many presentations on this.

Over and over again we have heard that UHF covers only perhaps one third as many square miles as VHF. And in this figure 1, which is based on the TASO information referred to in the reports of Dr. Towne, which were accepted in your record this morning, from a low band VHF up to a high band UHF there may be as much as a 5 to 1 disparity in coverage. The reason is simply that radio waves, as they ascend higher into the spectrum, tend to react more like light waves. In short, a lower frequency or a VHF signal will bend around corners and into valleys and rough terrain. Now, as you can see in figure 2, any UHF signal usually will not. Even trees have a deleterious affect on UHF reception. And in addition there is an inherent inability to radiate signals as strong in the U as in the V, and even the FCC engineers recognize this.

Now, let me offer some quick example. We have not studied exhaustively the eight market areas that are subject to the Commission's deintermixture proposal for the simple reason that we are not directly concerned in our company. But we are terribly concerned about the net effect of the erosion process.

As you can see in the figure 3 of this exhibit, the Indiana-Ohio-Kentucky area, where three of our stations are located, is saturated with television. The present coverage pattern in green shows some holes but the reason for that is we have attempted to be scrupulously

fair and to restrict the VHF circles to a minimum average of about 60 miles, so that actually where there are white holes, they are covered by outside VHF service.

Now, if you look at the bottom of the page on figure 4, you see what happens if all of the existing service in this area were shifted to UHF. Immediately, literally dozens of counties are without any service at all, and economically, for an unknown number of years ahead, without any hope of service.

Now, let us shift to Alabama, where we are also vitally interested, as I suspect Congressman Roberts is, too. I cannot compete with the earlier presentations from the distinguished judge from Andalusia, Mr. Chairman, but in any event, this illustration shows the same picture.

Figure 5 shows the VHF coverage and the existing UHF coverage in the northern end of the State, with practical saturation, and figure 6 shows what happens if these present services are shifted to the UHF, with a majority of all the area in Alabama without any coverage at all, and very little hope of it, again on economic grounds.

Are the hundreds of thousands of these small towns and rural citizens second-class citizens? Surely the rural people deserve equal consideration with their big city brethren. And even if it is felt that rural and small town citizens are second class, we feel that the worst they deserve is a single service before their city cousins get multiple services.

Now, let us consider the cities for a moment. There is another exhibit here to illustrate this.

It can be shown that any changes from VHF to UHF will deprive rural citizens of service regardless of claims to the contrary by theorists, commissioners, and networks. But this is not to say the cities are entirely safe.

Take, for example, figure 7 here which shows a map section of Cincinnati. We have drawn a line from our television tower in Cincinnati through the little suburb of Miami Town, which is only 8 or 10 miles from downtown.

Now, if you suppose we could cut a section through the earth along this map with a giant knife, and look at the cross section like a piece of cake, figure 8 is what you would see. This is what we call a profile. We have exaggerated the vertical scale of this profile, but the relationships are entirely accurate.

We draw a line on this map from the top of the television tower across the tops of the hills. You can see pockets behind the hills that we call shadow areas, because this is exactly what they are.

Now, if our antenna were a giant light bulb, and we did this at night, all the red areas on this diagram would be shadows. You could not see the light from there. If we changed the antenna to a UHF antenna, it is a safe bet you could not see a UHF television picture from there either. We know you can see VHF from there. But UHF is extremely doubtful, unless you were to put in a very expensive and elaborate cable and antenna system to get the signal over the top of the hill. And even then it is sometimes impossible.

The same goes for substantial areas where there is line of sight, but where there are trees in the way. Again, from the TASO studies,

a line of trees half a mile from a farmhouse will frequently prevent effective UHF reception, unless the householder builds a hundred foot tower or performs a deforestation project.

We all hope the day will come when our engineers will have solved many of these problems. And when that day arrives no doubt UHF will supply a very much more valuable additional service than is presently provided. But its technical limitations make it a certainty that it can never adequately replace VHF.

A present television system which reaches every nook and cranny of the Nation and provides a multiple program choice to 95 percent of nearly 50 million television homes cannot seriously be called a shortage of service. To risk a loss of part of this to achieve a theoretical economic result seems much like burning down a barn to get rid of the rats.

In summary, I would like to point out that the television that has been characterized as a wasteland only recently gave the Nation the greatest show in history, as 135 million viewers, it is estimated, lived through the triumphal journey of Colonel Glenn into space. There were three separate network feeds of this epic event. Perhaps—only perhaps—proliferation of limited coverage stations might have made it possible, or might in the future make it possible, to have eight different versions of such an event that would be fed into Washington or New York. But they would do so at the exense of vast areas left without any service at all, if any existing VHF service is deleted.

We do not believe some Americans are entitled to multiple showings of something this significant at the cost of many not seeing it at all.

The convenience or need of the network or an advertiser to reach big city customers with a variety of messages is no excuse for destroying or even curtailing indispensable television service to rural and small-town families.

Accordingly, Taft Broadcasting Co. respectfully urges you to consider favorably the proposals as outlined in the Roberts bill and companion legislation, and to reject the contrary concepts. First of all, to preserve existing services by an injunction on deintermixture, or other VHF to UHF channel shift; and secondly, to encourage the future orderly growth of additional UHF service through appropriate all-channel receiver legislation.

This latter, assuming this requirement meets the test of constitutionality, seems to us the logical, orderly, and feasible means to accomplish the FCC's goal of fostering the expanded use of UHF.

Thank you very much for your time.

(The full statement of Mr. Rogers and figures referred to follow:)

STATEMENT OF LAWRENCE H. ROGERS II, ON BEHALF OF TAFT BROADCASTING CO.

My name is Lawrence H. Rogers II. I am executive vice president of Taft Broadcasting Co., operators of radio and television stations WKRC, Cincinnati, Ohio; WBRC, Birmingham, Ala.; and WTVN, Columbus, Ohio; and television station WKYT-TV, Lexington, Ky.

Taft Broadcasting Co. appreciates the opportunity afforded by the chairman and the subcommittee to make known its views relevant to the matter of deletion of VHF television assignments, and to support the proposed legislation embodied in H.R. 9267 introduced by Representative Roberts, H.R. 10219 introduced by Representative Scherer, and numerous companion bills.

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We also appreciate the opportunity to use projection equipment to illustrate this presentation, since it is our belief that the visual slides are essential to a full understanding of the technicalities involved. We will be pleased to submit copies of the visual material for the record if the subcommittee so desires.

Millions of words of testimony on these and allied subjects have flowed in hearings before this committee, before the Senate committee, and before the Federal Communications Commission in the year since the Commission's sixth report and order in 1952.

It will not be our purpose to rehash ancient history, nor to trace the development of events long familiar to the committee.

Taft Broadcasting would point out merely that FCC proposals looking toward what it calls fostering the expanded use of the UHF, while laudatory in theory, is fraught with practical dangers to the continuation of a television service capable of serving the public interest, convience and necessity.

The Commission has brought forth various proposals, some specific, some general. Some involve deintermixture of specific cities, to delete VHF assignments, in order to give a greater impetus to UHF development. Some involve degrading VHF technical standards in order to provide more local services. Some involve waiving the duopoly rules in order that VHF operators be permitted to maintain separate UHF stations in the same cities, looking toward the eventual deletion of the VHF assignments. The one common thread through all these proposals, whether they are rulemaking proposals, or merely exploratory proposals—the one common thread is the eventual conversion of all U.S. television assignments to the UHF spectrum. The underlying philosophy of the Commission appears to be the theory that more stations, regardless of technical facts, will upgrade and improve the Nation's competitive television service.

It is to this general theory, and to the specifics of a UHF service versus a VHF service, that Taft wishes to speak.

Let it be noted that Taft Broadcasting Co. is not without considerable experience in all areas of broadcasting: AM radio, FM transit radio, separately programed FM commercial broadcasting, low and high band VHF television, and UHF television. Taft Broadcasting's experience in this field covers a period of 23 years. My own experience covers 16 years, including the conception, design, installation, and operation of one of the Nation's pioneer television stations. None of the opinions expressed in this testimony have been arrived at hastily, lightly, or ill advisedly. While we are admittedly concerned over the possible effects of certain FCC proposals on the prosperity of Taft Broadcasting Co., we likewise maintain that continuation of the present pattern of service is inseparable from the greatest public interest in broadcasting.

Perhaps the most frustrating element of the TV allocations problem is that it should exist at all. Why, one might logically ask, should there be a shortage of channels when they use the unlimited air above the earth? In order to answer that question, you have to understand how much room in the air one TV channel occupies, as compared with a radio station frequency.

Imagine, if you will, that television transmission is a hose, there is so much to be squirted out, that in order for the public to get wet you have to have a firehose, not just a bathroom spigot. So one TV channel takes up 6 megacycles. What's a megacycle? It's 1,000 kilocycles. What's a kilocycle? It's one of those subdivisions on your ordinary AM radio set. There are roughly 1,000 kilocycles from the lowest numbered radio station to the highest numbered. Therefore, it takes six times as much space in the air for just one TV channel as it does for all the radio channels on your entire set. Thus, 12 television channels take up 72 times as much of the public's airspace as all the AM radio stations in the land and there are nearly 4,000 of them on 103 channels. Thus the shortage of VHF channels. There are only 12 VHF channels available to television use. The FCC doesn't believe you can adequately cover the entire United States using only those 12 VHF channels, and we agree with the Commission. But the Commission feels the Communications Act of 1934 requires them to allow more stations.

So the Commission opened up television broadcasting to 70 new channels—still 6 megacycles wide—occupying 420 megacycles of spectrum space, or 4,000 times the space occupied by your AM radio—way up the spectrum in what is known as ultrahighy frequency range, or UHF. Why did they find all this space available? Because no one had yet invented a way of generating good strong signals for broadcasting at such ultrahigh frequencies. Now these chan-

nels are in operation, and it has been found that there can be television broadcasting at these high numbers. In fact, there are about 75 commercial stations on the air in these channels, including our station WKYT in Lexington. So the Commission believes it will be necessary to make more use of the UHF channels in order to satisfy the need for more stations and we agree with the Commission.

But this is not the whole story.

The UHF frequencies provide an inferior service to the VHF because a comparable signal, able to be broadcast and received by as many people as VHF, is simply not technically possible. Let us return to the hose analogy. Let's imagine the lowest VHF frequency as a 4-inch firehose. It will lay a very heavy column of water over a long distance, or loop it up in the air and drop it over a hump in the fairway, if you happen to be watering a golf course. The higher the frequency, the smaller the diameter of the hose. As a result, it takes much more water pressure to direct the stream as far, all the while the stream is flattening out. When you change from a VHF hose to a UHF hose, you might imagine a pinpoint stream squirting out parallel to the ground. Not only will it not go as far, but it is so flat it won't even get the ground wet on the other side of a bunker. But, it is very useful for hooking up a small rotary sprinkler to water the tender grass on a flat green.

This then, in elementary form, is the difference between VHF and UHF.

Neither one is adequate to cover all the depth and breadth of the United States. Both are absolutely necessary to keep the present service and expand new services to the American public.

Now a word about the relative UHF and VHF coverage. When considering radio waves, you must remember that the higher the frequency the more these pesky waves resemble light. That is, at a low channel a television signal will seem to bend around a corner and roll down into a valley. A high VHF channel, or a UHF channel, will bounce off a hill and leave a shadow area behind it. In fact, in the UHF, even the leaves on the trees have a profound effect upon reception of signals.

Exhaustive studies reveal that the average VHF channel in average terrain will provide a quality service over a radius from the transmitter of 60 miles. The average UHF channel, under similar circumstances, will provide a coverage pattern over a radius of 35 miles. But this does not take into account the excessive number of holes, or pockets, in this area due to shading of hills, trees, buildings, or whatever other obstruction may dot the terrain.

Now about these studies: In 1956 the FCC invited the television industry to join in an all-out technical attack on what it called the effort to make UHF television as good as VHF television. The FCC developed the Television Allocations Study Organization, known as TASO, which made a comprehensive engineering study. The results were published in the TASO report of March 1959. From the report and from its principal author, Dr. George R. Towne, dean of engineering of Iowa State University, came the following facts:

"Under * * * practical conditions, UHF signals are lower, rather than higher, than VHF signals for the same transmitter power and antenna locations.

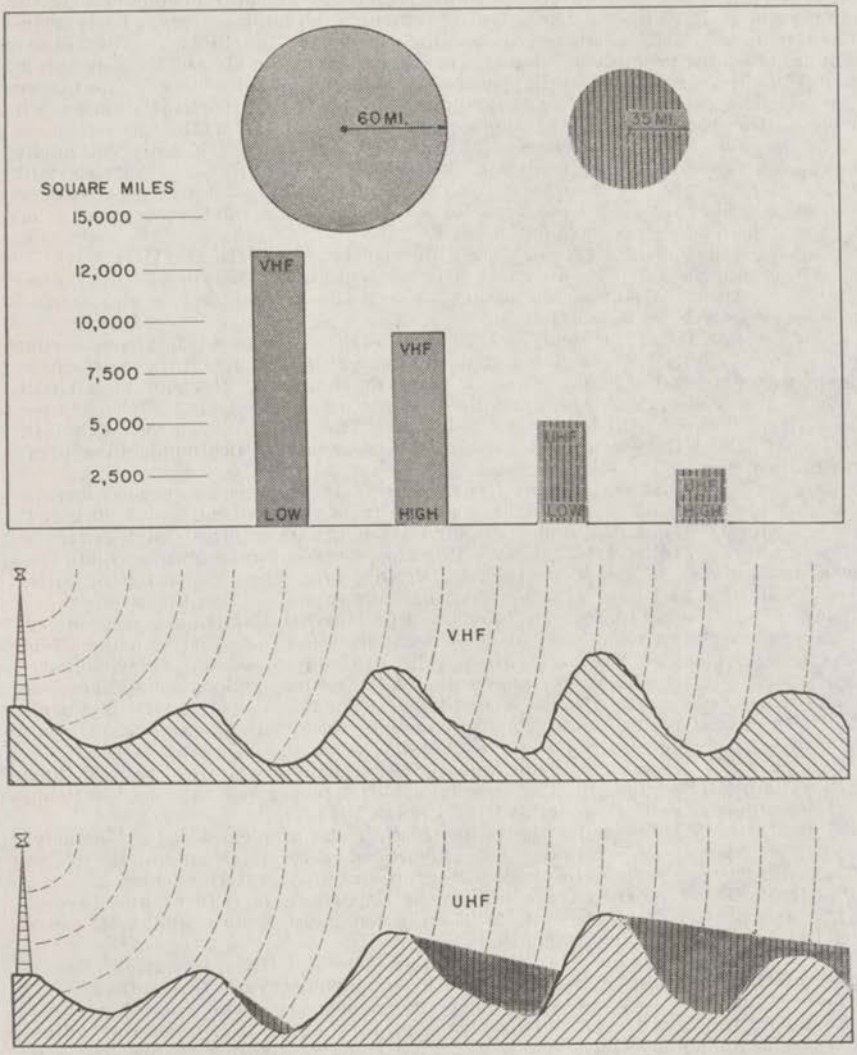
"Deep nulls are more frequent at UHF than at VHF.

"Data in the TASO reports shows another serious problem at UHF; namely, the deleterious effect of trees in the neighborhood of receiving antennas. These effects can be very serious in areas which are only moderately wooded.

"Still another factor, and probably most important, is that at and beyond fringe areas, UHF field strength falls off much more rapidly and more completely than does VHF field strength.

"* * * the fact remains that the area served by a UHF transmitter is very substantially less than that served by a lower powered VHF transmitter."

Now we ask you to recall your school days geometry. The area of a circle is found by the formula πr^2. This means pi, or roughly 3.14, times the radius of a circle, multiplied times itself, will give you the square measure inside a circle. Let's examine the comparison of area served by a VHF station and a UHF station, all things being equal, more or less. The VHF station will serve 60 miles times 60 miles times pi (3.14), or a total of about 11,300 square miles. The UHF station will average out to 35 miles times 35 miles times pi, or a total of about 3,800 square miles. In area alone, the typical VHF station will place a usable television signal over three times as many square miles as its equivalent opposite in the UHF. Bear in mind that these circles are averages only. A low band VHF will outcover a high band UHF by a ratio of 4 or 5 to 1.


60 MI.
35 MI.
SQUARE MILES
15,000
12,000
10,000
7,500
5,000
2,500
VHF
LOW
VHF
HIGH
VHF
LOW
VHF
HIGH
VHF
UHF

Now, what has all this to do with the proposed legislation?

The FCC has made it plain it is dissatisfied with the coverage of the United States by a joint VHF–UHF system; and, therefore, it intends to change all television stations to UHF assignments throughout the Nation.

It is our contention that this is a case of the cure being far more harmful to the patient than the illness. This TV system, which has been characterized as a "wasteland," has grown from nothing to the most fantastic communications machinery in the world in a mere 13 years: 98 percent of the American people are within reach of television; nearly 50 million homes are already equipped with TV sets; and 95 percent of all the TV homes receive competitive service from three or more stations. This could hardly be described as a shortage of service. Only days ago 135 million people rode on the wings of Friendship 7 with Lt. Col. John Glenn, as he became the free world's greatest hero since Charles Lindbergh. This fabulous coverage certainly was not reminiscent of a wasteland; indeed, television might better be described as a wonderland.

This is not to say television is free of problems; nor is it incapable of improvements. Everyone is aware of the continuing hue and cry raised about every sector of the television business; the need for more programs, more facilities, more talent, more technical advances; in short, more hours in the day.

Where we differ from the FCC is in the theory that the simple answer to these problems is merely to put more stations on the air.

We categorically reject the notion that more stations will improve the product. Indeed, if you want the classic example of this theory in action, one need only look at AM broadcasting, wherein the number of stations on the air has increased from about 900 to 4,000 in 20 years. The resulting plethora of stations resulted not in an upgrading of quality of service, but the exact opposite. The technical excellence has deteriorated to the point where it is all but impossible to find a reliable nighttime radio service; and, it has spawned the cultural blight on our teenagers that is described in some quarters as contemporary progressive music, in others as rock 'n' roll, and more accurately as the screamin' meemies. It is true that almost every town in America has its own radio station. It is also true that most cities have too many radio stations, and that economic necessity calls for programing by the lowest common denominator in all too many instances—a fact which only recently has been publicly recognized by Commissioner Fred Ford.

We feel certain the same thing will result in television if a wholesale effort is made to multiply the number of stations by deterioration of VHF standards, or by shifting all stations to UHF. The economic facts of life do not yet permit us even to contemplate operating television stations in some if the small towns that now have radio stations. And even if that unlikely day arrives, it will be necessary for every present-day VHF viewer to buy an antenna, a booster, or a new set to get any pictures at all. This is why we are convinced that nationwide competitive television means the continuation of what we have plus the orderly addition of UHF assignments as they become feasible.

We would like to show you what would happen in the areas served by our company should the FCC's all-UHF proposals become the law of the land by administrative fiat.

This map shows existing TV coverage in the State of Ohio and surrounding area. In order to be scrupulously fair we have underestimated the VHF coverage to a minimum average. Thus the white areas on this map actually do have service, and in most cases two or three services. There are also many UHF stations indicated, for example: Zanesville, Parkersburg-Marietta, Akron, Canton, Lima, Muncie, and our own station in Lexington. All in all, this section is practically saturated with television service of superb technical quality.

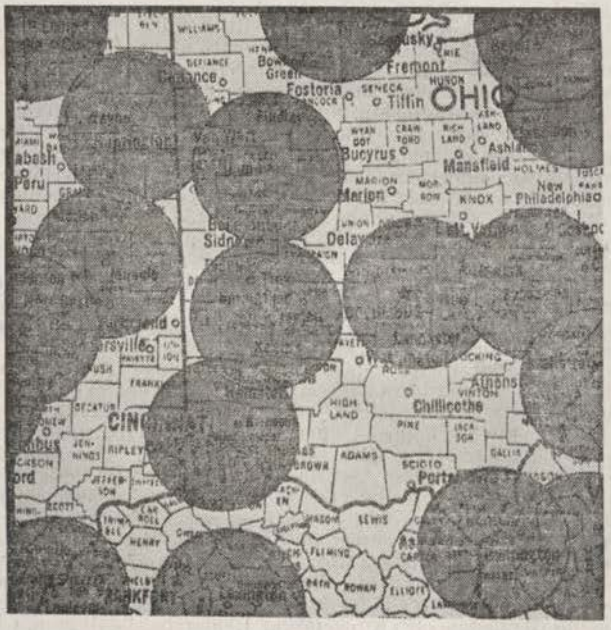
Now, look what happens when we substitute for this system the FCC proposal to switch all existing VHF stations to UHF. Immediately great gaps of no service whiten the map. Southern Ohio, including Ross, Pike, Scioto, Highland, Adams, Hocking, Vinton, and Jackson Counties, is completely left out. The city of Portsmouth would be without service at all in view of the impossible terrain there. North central Ohio, including the counties of Erie, Huron, Wyandot, Crawford, Richland, Marion, Morrow, and Knox lose virtually all service. In Indiana, Union, Fayette, Decatur, Ripley, Jennings, and most of Jefferson Counties are without commercial TV. And in Kentucky, practically all the people outside the metropolitan reaches of Louisville, Lexington, Cincinnati, and Bowling Green are without any television service at all.

Now, let's shift the scene to Alabama. Again we have used minimum averages. There are also existing UHF stations shown here, for example in Florence, Decatur, and Huntsville.

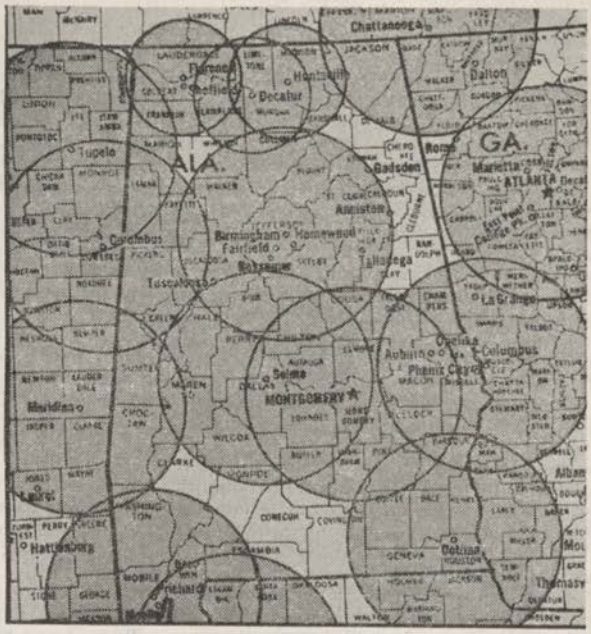
PRESENT UHF VHF COVERAGE



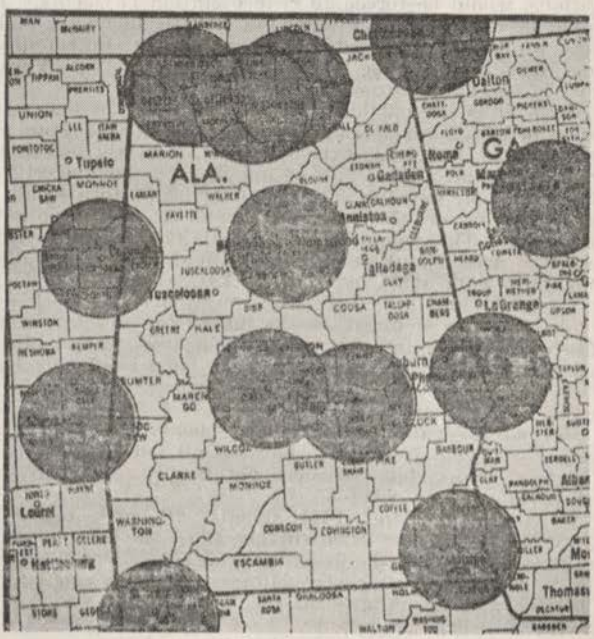
COVERAGE IF ALL EXISTING STATIONS MOVE TO UHF



PRESENT UHF VHF COVERAGE



COVERAGE IF ALL EXISTING STATIONS MOVE TO UHF



Now, let's suppose we were to switch all these stations to UHF, as repeatedly proposed by elements within the FCC.

Immediately great gaps of no service whiten the map. Practically all of southern Alabama, as well as the western half and the east central area, is completely left out. Counties like Marion, Walker, Fayette, Tuscaloosa, Green, Hale, Marengo, Clarke, Monroe, Butler, De Kalb, Etowah, Cherokee, St. Clair, Calhoun, Cleburne, Randolph, Coosa, Tallapoosa, Chambers, Barbour, and many others are completely left out. Cities like Gadsden, Anniston, and Tuscaloosa are left without any commercial TV service at all.

Are these people second-class citizens? Is the Commission prepared to defend removing from people in rural and smalltown America the greatest contact with the rest of the world they have ever known? We can't answer those questions but we believe you gentlemen can, before this fantastic proposal has a chance to proceed beyond the point of no return.

One quick answer that will be supplied by proponents of this plan is that by doing what we have described you will create a scarcity of facilities which will force the establishment of new smalltown stations in every one of the cities or towns in these new "white" areas, thus giving great impetus to the diversity of local expression available to the American public via television.

This is a snare and a delusion for several reasons. Take a city like Portsmouth, for example. Portsmouth has had a shrinking population and dwindling economy for some years now. It is already a very tough competitive radio market. Should an entrepreneur risk the half million dollars necessary for a UHF television station in Portsmouth, it would still be necessary for each resident of Portsmouth to buy a converter and an antenna to receive the station on his set. Meantime, he would have lost service from three stations which provide regular daily competitive three-network service to the community, and he would be in no mood to buy anything. More important, the operator, having no audience, would go through exactly the same laborious, costly, and heartbreaking experience that everyone who has pioneered this business has gone through before him: no audience; no programs—no programs; no audience.

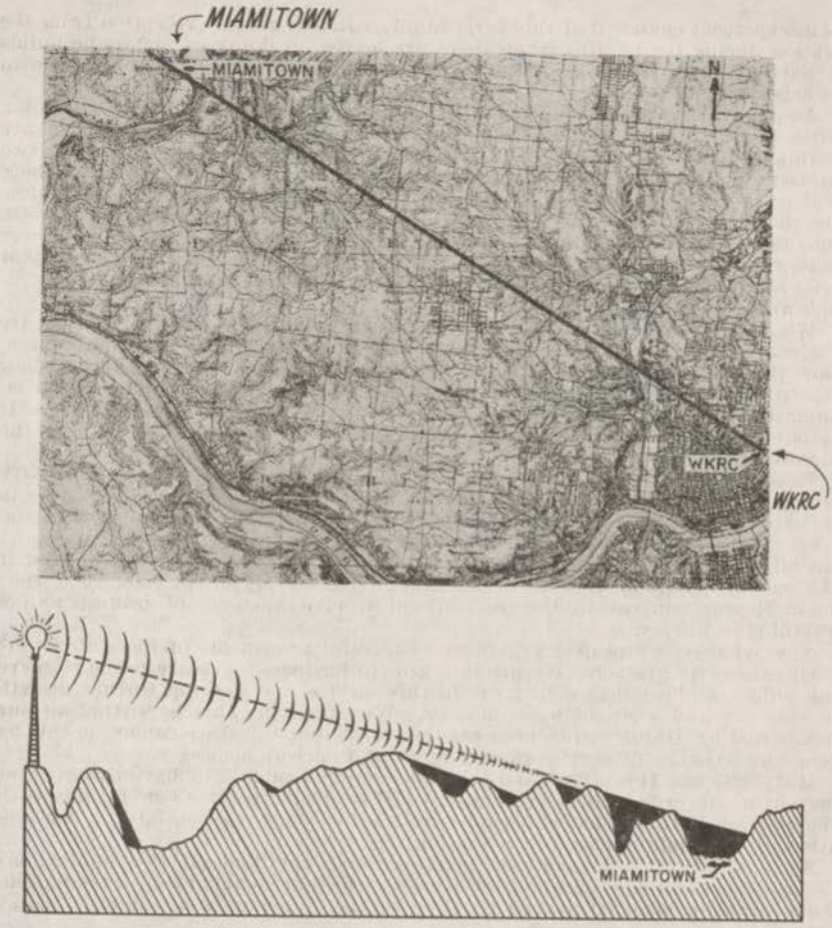
Networks, with their pies sliced twice as many ways, with twice as many stations, would be forced to reduce station payments. The network franchise would become the most important key to survival; and the Federal Government would have succeeded in turning over control of an entire communications machinery to the controlling giants in New York, under the mistaken guise of spreading ownership and control.

Again, it is the public who is the big loser because networks simply cannot force an advertiser to pay for extending his program into markets that are too small to justify his expenditure. No matter how much pressure is applied from Government, the law of supply and demand still controls the marketplace. No one can legislate an advertiser into a small market. Without the advertiser support there is no programing; without programing, no audience—and so on. This would require drastic changes in operation of networks, as a result of which station revenues would very likely disappear altogether, as they have done with radio networks. An all-UHF television industry would further compound the perennial question of network domination of the economics of television. It would insure the absolute domination by networks of every affiliate in every market, at least until someone develops a quick and dirty method of programing television locally as has been done in radio. The possible horrors of a video eqivalent of rock 'n' roll might really be described as a wasteland.

Now let us examine technical problems close in to the stations. We know this move would be a death blow to all television reception in large parts of our rural areas; but this does not necessarily mean the urban areas would still be adequately covered.

As we stated earlier, VHF signals will bend around hills and buildings to fill in shadow areas. The further from the station you are, and the higher the channel number, the less this holds true. But for all practical purposes, all VHF signals cover all metropolitan areas with equal facility.

Let us take an actual situation. Here is a blowup of a map section of the Cincinnati area. On it you will see a line drawn from the present WKRC–TV tower (at the lower right) to the village of Miamitown. You can see the Ohio and Miami Rivers and also the contour lines, which are the curved lines indicating altitude above sea level. Now let's pretend we can take a slice right through the earth along this line so you can get a look at a cross section of the whole area. This is what we call a profile.



We have exaggerated the vertical scale to show the hills and valleys in sharp relief, but everything is still very much in proper relationship. Now you can see that, if we draw lines from the top of the tower across the tops of the hills, we can shade in the pockets behind the hills that are what we call shadow areas. This is exactly what they are. If the top of the tower were a powerful light bulb, and we actually did this at night, then all the shaded parts on this diagram would, on the actual terrain, be in the shadows. You could not see the light from there. It is also a reasonable assumption that you can't see a UHF television picture from their either. Now we know you can pick up the VHF signals in these pockets, because our experience tells us so. The experience of the TASO groups, and the experience of many present-day UHF operators tells us that you cannot count on receiving UHF there. Some people will get it. Some people will get it if they rig up an elaborate antenna with hundreds of feet of antenna cable, if they can afford it, or if they know how. But most of the residents of deep valleys like this will not be able to count on getting service. And many of them won't get it at all.

Now, let's shift the scene to an Ohio farmhouse. This home is well within the theoretical 35-mile range of our new UHF station, and the terrain is fairly flat. In fact, a small-scale profile, made the same way as the first one, shows that much of the area is probably within sight of the make-believe light on top of our tower. But a half mile from the house on this farm there is an edge of woodland, with trees from 40 to 60 feet in height. According to the trees study made by TASO Engineer, H. T. Head, referred to by Dr. Towne, there

is a 50-percent chance that this farm family will not get any reception from the station during the months when there are leaves on the trees, unless he builds a 100-foot tower in his backyard to be sure he had escaped these little-known interference effects.

As a third alternative, let us shift the scene to Leesburg, Ohio, a charming little farm town in Highland County. Today the residents of Leesburg are within easy range of eight VHF television stations: three in Cincinnati, two in Dayton, and three in Columbus. After the proposed all-UHF shift, there will be no television reception at all predictable for Leesburg, Ohio. Of course the theory is that it will receive service from a new UHF which will surely rush into the vacuum in Wilmington, Ohio. But even if some economic miracle ever makes it possible to have some sort of television station in Wilmington, does that offer an acceptable replacement for eight metropolitan television services, available at the flick of a wrist?

We believe the implications of this proposed new replacement service are entirely too clear to you for us to have to explain it further. It is our contention that rural people in Alabama and Ohio deserve a continuation of their television service. It is our contention that a Clermont farmer deserves a continuation of his television service without resort to a deforestation project. It is our contention that the people of Leesburg, Ohio, are entitled to keep the eight-station competitive service to which they have grown accustomed.

If you feel otherwise, you need only permit the FCC to proceed along the path which it has charted in order for the things which we have described to begin to happen. We know that many sincere and dedicated people are working on what they honestly believe to be a serious public problem; we do not doubt the sincerity of their proposed solutions. On the other hand, we believe that if the general public knew what a catastrophic change lay in store for them that their Representatives in Congress would receive a storm of protest unlike anything in history.

Now what do we propose? Are we merely fat proponents of the status quo? Of course we are not. We are in a growth business. We are proud to serve the public, and we aspire to grow in this service and develop further growth in the size and scope of our company. We cannot do this by sitting on our hands and by asking you to preserve the status quo. And we cannot do this by removing existing TV service from millions of American homes.

H.R. 9267 and H.R. 10219 and a number of companion bills have the effect of permitting an orderly development of UHF television service side by side with the existing VHF service which we have tried to show is essential to a continuation of the public's access to television.

First of all, this legislation clearly enjoins the Federal Communications Commission from deleting the VHF stations which are mandatory for the nationwide service envisioned by and required by the Communications Act of 1934 as amended.

The Commission itself, a scant year ago secured an additional appropriation of $2 million in order to conduct technical tests for the purposes of determining the potentialities of UHF transmission. These tests have barely begun. Yet the Commission's proposals indicate that it has already decided in advance of the technical findings what the solution should be. These proposed solutions involve a catastrophic dislocation of existing service that would deprive millions of Americans of any television at all, and other millions of the competitive television services they now enjoy.

Nothing could more dramatically demonstrate the value of this service than the electrifying effect upon the morale of the entire American Nation of the recent space exploits of Col. John Glenn. Just for example, let us examine a possible effect of these proposals on the Mercury space flight coverage. As it was, all three networks carried complete coverage of the entire event, having already invested millions in the various false starts occasioned by the weather. Across the Nation there were three complete round-the-clock competitive presentations of the epic of Colonel Glenn. If we suppose for a moment that the Commission's all-UHF plan had been in effect, resulting in as many as five new networks, there might have been eight different choices of coverage in Washington, in New York, and in other major metropolitan centers. But at the same time there would have been vast rural areas of the Nation where none of the people would have seen any coverage at all.

To risk the loss of any part of this kind of service in order to achieve a doubtful theoretical result through proliferation of economically unsound or

marginal stations seems to us foolhardy at best, and unforgivable at worst. H.R. 9267 and H.R. 10219 will preclude any such tragic results.

These bills also provide for a Commission request that Congress give it the authority to regulate the technical standards of receiving equipment so that they might all receive new UHF station signals as well as existing VHF signals. Assuming that this authority meets the test of constitutionality, this seems to us to be a sensible and orderly approach to the problem. While the results will not be immediate, they will give assurance that future set owners, and those who replace their present equipment will be able to receive UHF signals. Even so, this will not overcome the essential inferiority of UHF transmission characteristics. It will merely make it possible for the licensee of a UHF station to be certain that receiving equipment able to tune in his station will be in the hands of the public. When and if the day ever arrives that the state of the art equates the coverage reach of UHF and VHF, then such changes as are proposed could be undertaken without serious damage to the public interest.

Accordingly, Taft Broadcasting Co. urges favorable consideration by the House Committee on Interstate and Foreign Commerce of H.R. 9267, H.R. 10219, and the proposed companion legislation.

The CHAIRMAN. Thank you very much, Mr. Rogers.

Any question?

Mr. SPRINGER. Mr. Chairman, may I congratulate Mr. Rogers on his statement. This is living proof that you can make an effective statement in brief.

Mr. ROGERS. Thank you, sir.

The CHAIRMAN. Thank you very much. We are very glad to have your testimony.

The CHAIRMAN. Our next witness is Mr. Paul W. Morency.

Mr. Morency, we are glad to have you, and we are glad to have your statement.

STATEMENT OF PAUL W. MORENCY, PRESIDENT, THE TRAVELER'S BROADCASTING SERVICE CORP., LICENSEE OF WTIC–AM–FM–TV, HARTFORD, CONN.; ACCOMPANIED BY HOWARD T. HEAD, CONSULTING RADIO AND TELEVISION ENGINEER, WASHINGTON, D.C.

Mr. MORENCY. Thank you, sir. I appreciate this opportunity. I know that the hour is getting late. I will make my statement as brief as possible. I do have a complete statement which I would like to have put in the record, but I would like to comment only briefly on it, if I may.

The CHAIRMAN. Very well. You may have your statement included in the record.

Mr. MORENCY. Thank you.

I have with me also Mr. Howard Head, our consulting engineer, and at a certain point I would like to suggest that technical questions, if you have any, can be addressed to him.

My name is Paul W. Morency. I am president of the Traveler's Broadcasting Service Corp., licensee of WTIC–AM–FM–TV, Hartford, Conn. I have been the head of the broadcast operations of our company for over 30 years and am intimately familiar with broadcast conditions as they pertain to Connecticut.

I strongly believe that the public interest of the United States best would be served by the enactment of H.R. 9267, or any of the other bills pending before this committee having a similar objective.

Our company first applied for television in 1947, and amended to file for channel 3 when it was allocated to Hartford in 1952. We were involved in a hearing and did not receive a grant until 1957.

The first petition to remove channel 3 from Hartford was filed in 1954 by UHF stations which had been operating since 1953 and 1954. Since then, 12 other petitions and rulemaking proceedings have been filed or instituted.

Due to the consolidation of several of these, the Commission has at this time denied the petition to remove channel 3 from Hartford six different times. The first denial was in December of 1954, the second in November of 1955, the third in June of 1956, the fourth in February of 1957. This fourth denial, which had been appealed to the U.S. Court of Appeals, was affirmed in July of 1958.

In June of 1957, the Commission's fifth denial to delete channel 3 from Hartford was issued.

I would like to read the statement of the FCC in their decision in that case.

The Commission stated, in supporting the retention of channel 3 in Hartford:

> There is no doubt that VHF, with its superior propagation characteristics, would be much more likely to provide service to the areas of rugged terrain which the record discloses to be found in the Hartford area. Deleting channel 3 from Hartford, therefore, would deprive a substantial number of persons of their only service and a much larger number of persons of a second service.

The record which showed rugged terrain to be present in the Hartford area is still true. The rugged terrain has not changed or moved, and this same terrain still makes it impossible for UHF signals to cover the area adequately.

The Commission's statement made before channel 3 was on the air has proven true. This channel has provided service where none existed before.

On the appeal of this decision to the U.S. Court of Appeals, it was fully affirmed by that court, and the Supreme Court of the United States expressly refused to review this decision by its denial of a petition for a writ of certiorari.

So now we are up before the Commission for the seventh time on the same question—whether or not channel 3 serves the public interest by being allocated to Hartford.

Early in 1960, when our license was pending for renewal, the 11th petition from the UHF stations to delete channel 3 was filed, and we then decided to make the most detailed, comprehensive, and extensive field strength survey of television signals ever undertaken. Coincident with that engineering survey, we determined to make a survey of the quality of television pictures in the homes of viewers, in order to relate signal strength to picture quality.

We employed Mr. Howard Head, whose qualifications I will give you in a moment, to conduct this survey. It was decided that the work would be done in exact accordance with the technique established by the television allocation study organization, call TASO. This organization was formed in 1956 by all branches of the television industry at the request of the FCC to develop full, detailed, and reliable technical information and engineering principles based thereon, concerning the present and potential UHF and VHF television service.

Mr. Head was in charge of various parts of that TASO study, and was eminently qualified therefor to conduct this survey.

I would like to give just a little background of Mr. Head. He received his B.S. degree from the University of Arkansas in 1941, and

worked as an engineer with RCA laboratories before World War II. He was in the Signal Corps during the World War, and since then has been a consultant engineer for the past 20 years here in Washington. His qualifications are on file before the Commission.

Now, I would like to have Mr. Head detail—because there has been so much testimony here about what VHF covers and what UHF covers, and so on—I would like to have him give you a brief digest of just how we approached this survey, and what it showed when we had finished.

The CHAIRMAN. Mr. Head, since you have such an excellent background, coming from a great institution that is so well recognized, we would be glad to have your comments.

Mr. HEAD. Mr. Chairman, I appreciate your kind remarks.

Mr. Chairman, members of the committee, my name is Howard T. Head. I am a consulting radio and television engineer, a member of the firm of A. D. Ring & Associates, Washington, D.C. For over 20 years, our firm has specialized in providing professional engineering services to radio and television broadcasters, prospective broadcasters, the major radio and television networks, and others. We have undertaken professional engineering work for a clientele numbering in the hundreds, not only in this country, but throughout the world. We have done extensive professional engineering work for Radio Free Europe, Radio Liberty, and the Voice of America.

I am appearing here today on behalf of the licensee of television Station WTIC–TV, channel 3, in Hartford, Conn. I would like to summarize for you the results of extensive engineering surveys to which Mr. Morency has referred.

Our reason for going into these detailed engineering surveys was that our studies of the proposal which the Commission and other parties had made convinced us that the propagation curves which had been used resulted in the Commission and these parties concluding that there would be no loss of service as a result of deleting channel 3 from Hartford, and substituting a UHF channel.

But the actual experience in the operation of Hartford channel 3, however, as well as my own experience in measuring signals throughout Connecticut and Massachusetts convinced us that the actual television service in the area would be substantially less than that estimated by the Commission and by others using these propagation curves. This is particularly true in an area such as the Hartford area, where the rugged terrain existing throughout much of Connecticut and Massachusetts results in actual service considerably less than that shown by calculations.

Under these circumstances, where you cannot rely on the propagation curves, the only adequate substitute, in fact it is more than a substitute, is to go out into the field and see what is going on.

It was concluded therefore, that only by measuring the actual strength of the signals in the Hartford channel 3 service area, and by observing the actual quality of pictures received in the homes, would it be possible to make a truly accurate assessment of the impact on the viewing public of the removal of channel 3 from Hartford.

Accordingly, we planned and conducted an extensive survey, consisting of two parts, which were undertaken at the same time. First, we traveled throughout the entire Hartford channel 3 service area

with field strength measuring equipment to measure the actual strengths of the signals delivered not only by channel 3, but by every television station, both VHF and UHF, whose signals could be received throughout this area. Second, while these measurements of signal were being made, a trained crew visited large numbers of homes, and with the cooperation of the householders, observed actual pictures on the television screens. This crew rated the quality of the pictures, both for Hartford channel 3 and for all television stations whose pictures could be received throughout this area, and the householders were also asked to rate the quality of the pictures. The final judgment of picture quality was a composite of that provided by the trained interview team and the householders.

Literally thousands of measurements of signal strength and interviews with householders were conducted. As a result of these surveys, we were able to obtain a true picture of the television service now provided by channel 3 at Hartford, and all other stations serving the area, and to evaluate the consequences of substituting a UHF channel for channel 3 at Hartford.

In making these measurements of signal strength and conducting the interview surveys, we relied heavily on the work of TASO—the Television Allocations Study Organization—and the measuring and interview techniques which were employed were those also employed by TASO. These techniques represent the consensus of the FCC and the television industry as to the best methods for measuring the strength of television signals and determining actual picture quality provided in the home by television stations.

These field strength measurement and interview surveys confirm that the actual television service provided in this area is far less than that which would be estimated based on calculations alone. This is particularly true of UHF in this area because the terrain and forestation conditions throughout much of this area are extremely unfavorable to propogation signals at the UHF.

To give you an idea of what we found from these measurements and interview surveys, an analysis of the results showed that in Connecticut and Massachusetts, over a quarter of a million people, in an area of over 1,500 square miles, rely on channel 3 at Hartford for their only grade B television service. In addition, over 200,000 persons in an area of over 1,000 square miles receive grade B television service from only one other station in addition to Hartford channel 3. In contrast, the Commission's study—based on calculations alone and treating Hartford as an area of average propagation conditions—indicated that no viewers would lose all grade B television service if channel 3 were deleted from Hartford.

You may be interested to know that the findings at Hartford showed conditions almost totally different from those at Fresno. We conducted similar surveys of both VHF and UHF coverage at Fresno as part of the work of TASO. We made both field strength measurements and surveys of actual picture quality in the house, using the same techniques which we employed at Hartford. At Fresno, in contrast to Hartford, we found that actual UHF television service was, in fact, rendered to very substantial distances throughout the San Joaquin Valley, where conditions are almost ideal for optimum television coverage.

Having heard so much about the Fresno area, I am sure you may be curious to know what the significant differences are between the Hartford area and Fresno area which result in UHF coverage extending to very substantial distances at Fresno, while UHF coverage in the Hartford area is highly restricted. At Fresno, conditions are almost ideal for the propagation of UHF waves. The great bulk of the population to be served is concentrated in the San Joaquin Valley, where the terrain is very flat, where there are virtually no trees, and where high mountains exist to support very high UHF transmitting antennas. Under these conditions, UHF coverage approaches the ideal.

But conditions are very different in the Hartford area. For one thing, most of this area is characterized by rugged terrain, and the rugged terrain reduces the actual signals below the calculated values. This is true at both VHF and UHF, but the terrain reduces the UHF signals much more seriously than is true with VHF signals. Second, most of the Hartford area is heavily wooded. It is now well established that UHF signals are much more seriously obstructed by trees, even in the dead of winter, than is the case with VHF signals. At Fresno, by way of comparison, the San Joaquin Valley is virtually treeless.

Third, transmitting antenna heights at Hartford are limited both by practical and aeronautical considerations. The Hartford channel 3 transmitting antenna is approximately 900 feet above average terrain, a limitation which is established by the aeronautical authorities because of landing traffic patterns at Bradley Field, between Hartford and Springfield. Again, at Fresno, by way of contrast, the transmitting antennas are almost 4,500 feet above the floor of the San Joaquin Valley. These factors, the rough and rugged terrain, the abundance of trees, and the unavailability of extremely high transmitting antennas, making propagation conditions in the Hartford area almost totally different from those at Fresno.

Various proposals have been made for measures intended to improve the coverage capabilities of the UHF, but even if the most optimistic predictions should be realized, UHF coverage in the Hartford area would still fall far short of VHF coverage. One of the suggested measures is the use of higher power at the UHF so as to provide radiated powers on the order of 1 million watts. This is more than four times the radiated power now employed by any UHF station in Connecticut or Massachusetts; but even if all UHF stations in this area should undertake such power increases, the area relying on Hartford channel 3 for its only grade B service would still include more than a quarter of a million people, and those relying on Hartford channel 3 for their only choice of grade B television service would still be more than 190,000 persons.

Increases in transmitted power at UHF are relatively ineffective in extending the coverage of a UHF station, even under favorable circumstances, because the curvature of the earth effectively cuts off UHF service just beyond the horizon, whereas this is not the case at VHF. In rugged and heavily wooded terrain such as exists in the Hartford area, the mountains and trees produce the same results at much closer distances to the transmitter, with the result that transmitted power increases are relatively ineffective in extending the coverage range of

UHF stations. There is the further problem that UHF stations in rugged terrain frequently experience "holes" in their coverage, even at fairly close distances from the transmitter, and these power increases would do very little to alleviate the presence of these "holes" within the service area.

Another suggestion for restoring the service lost by shifting stations from VHF to UHF channels has been the use of so-called translators, boosters, and satellites. This problem is considerably more difficult than it sounds on the surface, because the areas to be served are large, irregular in shape, and located so that the topography restricts the coverage which can be provided by any single booster, translator, or satellite. In the case of Hartford channel 3, we estimated that something on the order of 36 translators or booster stations, even operating under ideal circumstances, would be needed to restore the coverage which would be lost by substituting a UHF channel for Channel 3 at Hartford. Actually, the conditions are far from ideal and this estimate is undoubtedly a substantial understatement of the actual requirements.

It has also been suggested that the use of community antenna receiving systems might be employed to restore some of the loss in service. Although community antenna systems are now enjoying widespread use to provide service to towns and other centers of population, they ordinarily leave the surrounding, less densely populated rural area completely unserved. Furthermore, even a community antenna system requires that there be a signal available from a broadcast station for redistribution, and the broadcast signal will be lost in those areas where the coverage of the broadcast station is cut back.

To summarize, studies based on calculations using average propagation curves were found to be unreliable in the Hartford area, and it was found necessary to make extensive measurements of signal strengths and large numbers of home interviews to determine the actual television service in the Hartford area. Over a quarter of a milion persons would lose their only grade B television service. Actually one-quarter of the area of the State of Connecticut would be out grade B television service. There are no practical means now available or foreseen for replacing the television service which would be sacrificed by the loss of channel 3 at Hartford.

Mr. MORENCY. You will note our testimony is in direct contradiction to that given by Mr. Coe and Mr. Putnam this morning. The difference in the way we arrived at our different positions could be that we actually measured the signal and watched the picture, and they used the compass and drew a 40-mile circle and counted that as coverage, which it is not in our case.

Gentlemen, I appreciate your hearing our statement.

We support the Roberts bill, and we hope there will be a restriction on the change of any V's as they now stand.

Thank you.

(The full statement of Mr. Morency follows:)

STATEMENT OF PAUL W. MORENCY

My name is Paul W. Morency. I am president of the Travelers Broadcasting Service Corp., licensee of WTIC–AM–FM–TV, Hartford, Conn. I have been the head of the broadcast operations of our company for over 30 years and am intimately familiar with broadcast conditions as they pertain to Connecticut.

I strongly believe that the public interest of the United States best would be served by the enactment of H.R. 9267 or any of the other bills pending before this committee having a similar objective.

WTIC–TV operates on VHF channel 3. Our company first applied for a VHF television station at Hartford almost 15 years ago on September 10, 1947. When we filed this application two VHF channels (channels 8 and 10) were allocated to Hartford. Action on our application was delayed because of two rulemaking proceedings regarding television allocations at Hartford which culminated in the 4-year television freeze. With the issuance of the sixth report and order in April 1952, channel 3 was allocated to Hartford, in lieu of VHF channels 8 and 10, and we immediately amended our application so as to request operation on channel 3. Due to the fact that other applications for the same channel subsequently were filed, we were involved in a competitive hearing which prevented a grant of our application until February 1957, almost 10 years after the application was first filed.

In the meantime, two groups had filed for UHF stations in Hartford-New Britain, and two other groups for UHF stations in Springfield-Holyoke, Mass. These applications were quickly approved by the Commission as there were no competitive hearings on these applications, and the UHF stations went on the air in 1953 and 1954. Although these UHF operators knew when they built their stations that channel 3 would be on the air as soon as the competitive hearing in which we were involved had terminated, in October 1954 these UHF stations asked the Commission to delete channel 3 from Hartford and move it to Providence, R.I. This petition to delete channel 3 was summarily denied by the Commission as not in the public interest, but throughout the intervening 7½ years these same stations have repeatedly filed petitions with the Commission seeking the deletion of channel 3 from Hartford. There is attached to this statement a chronological list of these actions and the resulting decisions. An examination of this list reveals that on 13 different occasions the UHF operators have filed petitions or comments with the Commission seeking to delete channel 3 from Hartford. Some of these petitions were consolidated with other proceedings, but on six separate and distinct occasions the requests to delete channel 3 from Hartford were denied. The proceedings now pending before the Commission in docket 14,241 will mark the seventh time that the Commission is to make a decision on this same question.

The Commission's denial of the Hartford and Springfield UHF stations' petition in 1957 made clear that the deletion of channel 3 from Hartford would have an adverse impact on the general public and that there is no UHF reception whatsoever in substantial parts of Connecticut and Massachusetts. The Commission's decision stated: "There is no doubt that VHF, with its superior propagation characteristics, would be much more likely to provide service to the areas of rugged terrain which the record discloses to be found in the Hartford area * * *. Deleting channel 3 from Hartford, therefore, would deprive a substantial number of persons of their only service and a much larger number of persons of a second service."

The "record" which showed "rugged terrain" to be present in the Hartford area is still true. The rugged terrain has not changed or moved, and this terrain still makes it impossible for UHF signals to cover the area adequately. The Commission's statement made before channel 3 was on the air has proven true—channel 3 has provided clear service where none existed before.

On appeal of the Commission's decision to the U.S. Court of Appeals, that court fully affirmed the Commission in every respect. The court found the Commission's decision "not only rational but reasonable." The Supreme Court of the United States expressly refused to review this decision by its denial of a petition for a writ of certiorari.

Although a layman like myself would be led to believe that this decision by the highest court of our land would have settled once and for all the question as to the status of channel 3, petitions, pleadings and comments continued to be filed by UHF stations requesting the deletion of channel 3 from Hartford.

When our application for renewal of license was pending before the Commission in the spring of 1960, the 11th petition to delete channel 3 from Hartford was filed by one of the UHF stations in the area, and we determined to make the most detailed, comprehensive and extensive field strength survey of television signals ever undertaken in the United States. We likewise determined to make a simultaneous survey of the quality of television pictures in the homes of listeners in order to relate signal strength to picture quality. It was further

decided that these surveys would be made by recognized engineers whose expertise, integrity, and objectivity would be beyond question. These surveys were made in exact accordance with the technique established by the Television Allocation Study Organization (TASO). This organization was formed in 1956 by all branches of the television industry at the request of the Commission to develop full, detailed and reliable technical information, and engineering principles based thereon, concerning present and potential UHF and VHF television service. These principles, together with supporting technical data, were made available to the Commission so that the information could be used in the Commission's channel allocation studies.

The field strength study made by our company in 1960 of all stations whose signals could be measured in the channel 3 listening area was carried out under the direction of Mr. Howard T. Head, radio consulting engineer and chairman of TASO committee 4.1 (measurement of service fields). He was personally responsible for the preparation of the TASO field strength measuring specifications and for conducting most of the TASO field strength measurement surveys. He was also a member of and participated actively in the work of TASO panel 4 (propagation data), panel 5 (analysis and theory), and committee 3.3 (picture quality virsus field strength tests). As a member of TASO committee 3.3, he participated in the establishment of the techniques employed for the in-home picture quality surveys, and was personally responsible for most of the TASO field strength measurements which were made simultaneously with the in-home surveys.[1]

The interview surveys made for us were supervised by Prof. William L. Hughes, head of the School of Electrical Engineering at Oklahoma State University, Stillwater, Okla., and chairman of TASO committee 3.3. The interviews were conducted by Donald W. Howe, Jr., associate professor of physics at Worcester Polytechnic Institute and Vernon P. Wilson, radio engineer.

The results of the field strength survey, computed from over 4,000 field strength measurements on all existing television stations serving the channel 3 area, demonstrated that a total population of approximately 273,000 persons residing in land areas of 1,625 square miles would be deprived of their own clear television signal if channel 3 were deleted from Hartford and that an additional population of approximately 206,000 persons residing in a land area of 1,221 square miles would lose their second and hence their only choice of clear television signals.

The results of the interview survey strikingly corroborated the information provided by the field strength measurements.

If further corroboration were needed of the disastrous effect which the deletion of channel 3 would have upon television viewing in Connecticut, it is supplied by the fact that as of February 1, 1962, the last date that an analysis was made, more than 10,000 viewing families, representing over 36,500 persons, have written to the Commission protesting the deletion of channel 3 from Hartford. The people of Connecticut are unanimous as virtually no letters indicating a contrary point of view have been filed with the Commission.

It is of great significance that the vast majority of the letters protesting the proposal to delete channel 3 have come from the areas which will lack any clear television if channel 3 were deleted.

Although newspapers and television stations are competitive media, the editorial comments of Connecticut newspapers were unanimously in favor of the retention of channel 3 because of the adverse impact which its deletion would have upon the people. Radio stations are also competitive with TV, yet some of the radio stations in the State editorialized on behalf of the retention of channel 3, and several owners served on the Governor's Committee for the Retention of Channel 3.

All of the cities and towns in Connecticut, as well as statewide and regional groups and organizations, which have adopted resolutions on the question, have unanimously voted to retain channel 3. As of February 1, 1962, 50 cities or towns of Connecticut had filed resolutions, as well as 23 State groups and associations, and 181 local and regional organizations. I am advised that since

[1] Mr. Howard T. Head received a B.S. degree magna cum laude from the University of Arkansas in 1941. Prior to World War II, he was an engineer with RCA Laboratories, Camden, N.J. During the war, he held various assignments as a commissioned officer with the Signal Corps Engineering Laboratories. His last assignment was that of Chief of the Technical Staff of the Director of the Signal Corps Radio Laboratory. Since the war, he has been with the engineering firm of A. D. Ring & Associates, in which he is now a partner.

February 1, 1962, many additional resolutions have been submitted to the Commission, all supporting the retention of channel 3.

Recent surveys conducted by the Television Service Association of Connecticut and the Independent Electronics Service Association of Hartford have produced additional confirming evidence. These surveys show that of the 20,000 viewers responding, more than 98 percent favored the retention of channel 3 at Hartford. Another survey made at the same time consisted of service and technical reports from 141 dealers and servicemen in 50 different Connecticut towns and cities. These reports confirmed the fact that extensive areas in Connecticut cannot receive UHF signals and must rely upon service from channel 3.

I do not see how it can be successfully argued in the light of all this unimpeachable evidence that "a significant loss of service to the public" would not result if channel 3 were deleted from Hartford.

It is basic that the Commission's first responsibility in the allocation of television channels is to provide at least one television service to all people of the United States. This mandate arises not only from the congressional enactment of section I of the Communications Act but also from the first priority set forth in the Commission's Sixth Report and Order on television allocations issued in 1952.

The deletion of channel 3 from Hartford would directly contravene this congressional mandate and the Commission's own first priority of television allocations because it would leave over a quarter of a million people without any clear television service, in addition to depriving many more of their only choice of service.

The removal of channel 3 from Hartford to Providence would be completely incompatible with the requirements of section 307(b) to the effect that there should be a "fair, efficient and equitable distribution of radio service among the several States and communities." Hartford has but one VHF station whereas Providence already has two television stations and soon will have the equivalent of a third. If channel 3 were allocated to Providence, it would have four VHF stations and Hartford would have none.

Accordingly, I urge the Congress to express in clear terms the policy that cities such as Hartford should retain their VHF channels rather than have them removed with obvious great loss to the television viewers. Otherwise, as the experience of our company demonstrates, those who seek to delete VHF channels will file an endless series of petitions, both during the license term and at renewal time, in an effort continually to relitigate the same question decided against them many times before.

I also urge the passage of all-channel receiver legislation so that there may be compatibility of television receivers in the hands of the public.

I wish to thank you for the privilege you have afforded me to present my views concerning the legislation pending before your committee.

SUMMARY OF PROCEEDINGS BEFORE THE COMMISSION AFFECTING CHANNEL 3 AT HARTFORD, CONN.

April 11, 1952: Commission allocated channel 3 to Hartford.

April 15, 1952: TBSC applied for channel 3.

October 7, 1954: UHF stations requested deletion of channel 3 from Hartford.

December 7, 1954: Commission's first denial of request to delete channel 3 from Hartford.

January 5, 1955: UHF stations repeated their request to delete channel 3 from Hartford.

March 31, 1955: Rulemaking proposed to delete channel 3 from Hartford.

November 10, 1955: Commission's second denial of request to delete channel 3 and institution of nationwide proceeding in which UHF stations again asked that channel 3 be deleted from Hartford.

June 25, 1956: Commission's third denial of request to delete channel 3 and commencement of rulemaking proceeding (docket 11,748) in which UHF stations filed comments repeating request to delete channel 3 from Hartford.

July 25, 1956: TBSC application for channel 3 granted conditioned upon outcome of June 25, 1956, rulemaking proceeding.

February 26 and 27, 1957: Commission's fourth denial of request to delete channel 3 (docket 11,748) and unconditional grant of TBSC application.

April 1, 1957: UHF stations filed for reconsideration of February 26 decision (docket 11,748).

April 29, 1957, and November 27, 1957: WWLP filed two separate comments in a rulemaking proceeding unrelated to Hartford (docket 11,957) reiterating proposal to delete channel 3 from Hartford.

June 24, 1957: Commission's fifth denial of request to delete channel 3 (docket 11,748).

July 19, 1958: U.S. court of appeals affirmed decision to retain channel 3 at Hartford as "not only rational but reasonable" (docket 11,748).

October 31, 1958: Commission's sixth denial of request to delete channel 3 (docket 11,957).

January 12, 1959: U.S. Supreme Court denied petition for a writ of certiorari (docket 11,748).

December 14, 1959: WWLP, in a rulemaking proceeding not pertaining to Hartford (docket 13,264), once again requested the deletion of channel 3 from Hartford. The proceeding was terminated August 2, 1960, without action on WWLP's request.

March 1, 1960: WWLP filed two separate petitions requesting (*a*) the conditional renewal of WTIC–TV's license and (*b*) the deletion of channel 3 from Hartford.

May 25, 1960: Commission granted unconditional renewal of WTIC–TV's license and did not pass upon WWLP's channel 3 request.

September 30, 1960: UHF stations filed a counterproposal in docket 13,375, which was initiated on February 1, 1960, and was unrelated to Hartford, again seeking the deletion of channel 3.

August 3, 1961: Notice of proposed rulemaking released by the Commission proposing the deletion of channel 3 from Hartford (docket 14,241).

March 2, 1962: Comments filed by interested parties in docket 14,241.

The CHAIRMAN. Mr. Morency, we are very glad to have your statement, and also that of your associate, before the committee, Mr. Head, on this subject.

We have from your great State a diligent member of this committee, who has been very active on this highly important, complicated subject. He has been carrying, I think, a full load on this subject during the entire time of these hearings, and not only in this but on other matters in this committee. He has shown a great interest. I think I should recognize Mr. Sibal first.

Mr. SIBAL. Thank you, Mr. Chairman.

I would first like to congratulate Mr. Morency and Mr. Head on their fine statements. I might say, too, Mr. Chairman, that my district is the one district in Connecticut which is not served significantly by channel 3 in Hartford. But I am familiar with the very fine job that it has done for many years from my period of service in the State Senate of Connecticut in Hartford.

Up until now, I have refrained from making any public statements on this VHF–UHF question, because as a member of this committee I felt an obligation to keep an open mind in listening to the testimony. But now, as the hearings draw to a close, I am constrained to say that the arguments for deintermixture simply do not stand up in weight against the arguments made by these witnesses and by so many who have preceded them.

I am frank to say, too, that I consider 11 proceedings against channel 3 on this question to be nothing less than a policy of harassment. I think it is the clear duty and the responsibility of Congress to take steps to insure that this ceases, and the public interest be protected.

Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Springer?

Mr. SPRINGER. Mr. Morency, I have been a judge, but I will have to admit I have never seen a docket in all my life to equal this one, where between the dates of December 7, 1954, and October 31, 1958, which is just a little over 4 years, you have had six requests to take you off the air.

Mr. MORENCY. We had more requests to take us off the air, but we had the Commission sustain our position six times.

Mr. SPRINGER. Six separate times, within less than 4 years, the Commission sustained your position. And now you have pending the seventh one at the present time.

Mr. MORENCY. That is right.

Mr. SPRINGER. Personally, I will say I have never seen a record like this. In a court of law, we certainly would end the proceeding once and for all.

Mr. MORENCY. Well, as a layman I thought after we had been up and through the Supreme Court that we were through with it. But we were back in it within 3 months.

Mr. SPRINGER. Thank you. And that is all, Mr. Chairman.

The CHAIRMAN. Thank you very much.

Mr. Head, when did you graduate from the University of Arkansas?

Mr. HEAD. In 1941, sir.

The CHAIRMAN. Is your home in Arkansas?

Mr. HEAD. Yes, sir; I was raised in De Queen.

The CHAIRMAN. That is in a very, very good district, the best district in the United States.

Well, it is very good to have you. I am glad to have a man that comes from my area.

Mr. HEAD. Thank you.

The CHAIRMAN. I am glad to have a man who has made such an outstanding reputation in this field.

Mr. HEAD. Thank you. I appreciate the opportunity to be here.

The CHAIRMAN. It is nice to have had you with us.

Mr. HEAD. Thank you, sir.

The CHAIRMAN. Mr. Ralph O'Connor. Mr. O'Connor is secretary of Television Wisconsin, Inc., station WISC–TV, in Madison, Wis.

Governor Thomson?

Mr. THOMSON. Well, I will say on behalf of Mr. O'Connor that we are very grateful that you have continued the committee hearing so that he could be heard today, after his long trip from Madison. I can say that he is not only an able manager of his station, but a very public spirited citizen who has served on the Governor's committee as chairman to the committee to employ the handicapped. I have watched his telethon proceedings in the raising of money for charities in Madison. He comes highly regarded before this committee.

Mr. O'CONNOR. Thank you, sir.

The CHAIRMAN. Mr. O'Connor, I might say to you that you have, from your great State, a member of this committee that has been diligent and on the job and highly interested in this, as in all this problems of public interest.

Mr. O'CONNOR. That is splendid.

STATEMENT OF RALPH O'CONNOR, SECRETARY OF TELEVISION WISCONSIN, INC., LICENSEE OF TELEVISION STATION WISC–TV, MADISON, WIS.

Mr. O'CONNOR. Mr. Chairman, in deference to Congressman Springer, and to my good colleagues from Hartford, we are the champions. And I will prove it to you in just a moment.

My name is Ralph O'Connor, I am secretary of Television Wisconsin, Inc., licensee of television station WISC–TV which operates on channel 3 in Madison, Wis. I am also the full-time general manager of WISC–TV and have resided in and been a broadcaster in Madison for the past 24 years. As this committee is aware, the FCC proposes to delete Madison channel 3 in one of its pending deintermixture proceedings (FCC docket 14239). This would have the result of totally destroying WISC–TV's present channel 3 service to over 1¼ million people in the south central Wisconsin area and would, we believe, seriously threaten the very continued existence of station WISC–TV on any basis.

I very much appreciate the opportunity to appear before the committee on this important matter. We at WISC–TV have had what we believe to be a unique experience with repeated deintermixture proceedings that is unprecedented in the annals of FCC activities or indeed at any administrative agency. I hope that briefly describing this experience will assist this committee in the fullest understanding of the problem and in reaching the best means to resolve it.

I appear here today in general support of those pending House bills or resolutions, such as the so-called Roberts bill, H.R. 9267, and similar legislative proposals which—while supporting the enactment of all-channel receiver legislation—would also limit the FCC authority to deintermix existing VHF stations or, in other words, to delete them or compel their involuntary shift into the UHF. WISC–TV also supports House adoption of the pending resolution (H. Res. 450) introduced by the Honorable Vernon W. Thomson, Congressman from Wisconsin's Third District, which would require that the FCC withhold any final action on deintermixture proposals until it has at least completed its experimental study of the UHF being made in New York City. This would insure that the FCC act on a fuller and more comprehensive factual record than it now has—a factor I will refer to more fully later.

While WISC–TV's position is that there should be some agency prohibition against compulsory deintermixture, we have taken special cognizance of the chairman's statement and believe that such a result could be accomplished either by means of a formal congressional condition on all-channel legislation, or by former congressional resolution to that effect, either as part of or apart from such all-channel legislation. Perhaps the latter would be preferable in formally expressing the congressional position but leaving its specific implementation to the administration agency. Clearly there is the need for some such formal congressional action or expression on this vital subject matter so as to preclude the threatened destruction of television service on which millions of Americans depend so heavily.

Addressing myself first to the general matter of the entire allocations technique of "selective deintermixture," we believe that it is

unlawful and beyond the FCC's statutory authority, both as to the stated FCC purpose of "equalizing competition," as well as the procedures being used to achieve it; that this technique is also arbitrary and discriminatory as to the few particular cities where it is sought to be applied; that it can offer nothing material whatever in the way of improving overall UHF development in any particular selected city or elsewhere in the country; and yet that it will at the same time result in depriving vast areas of their only VHF channels on which hundreds of thousands of residents depend for their only "regular and reliable TV service." To demonstrate these general and fundamental defects in the entire concept of "selective deintermixture," I would like to address myself for a while to its attempted application in Madison, Wis., with which I am most familiar. We believe that the consideration of the Madison aspect will best demonstrate such grave defects of this entire deintermixture concept and the reasons it should be proscribed by FCC action with the guidance, if not at the direction, of Congress.

Madison is the best illustration of how the FCC over the years has generally followed a fluctuating and often inconsistent policy with respect to selective deintermixture. It usually comes as a surprise when it is learned that the FCC on seven separate and distinct previous occasions in the past 10 years has reviewed the matter of Madison's television allocations, not just petitions, but real actions. On all seven prior occasions the FCC has denied proposals to change (or deintermix) Madison's allocations. And on all seven occasions it reaffirmed and retained the established allocation of Madison channel 3 originally made in its 1952 sixth report and order. Therefore, the present FCC proceeding is the eighth time in the last 10 years that the Commission has reopened and re-reviewed this matter of possible Madison reallocation. There has been no other comparable activity by the FCC anywhere else. Indeed, the vast majority of channels in the nationwide table of assignments which was first formulated in 1952 (in most major cities such as Los Angeles, Chicago, New York, Detroit, and the like) have not even been reviewed once by FCC since their original establishment. Sad experience has taught us that in administrative proceedings there is no principle of a litigated issue being absolutely barred from agency reopening, as there may be in court matters. But we believe that this continual agency reopening of administrative decisions that purport to be final, is contrary to law as well as to public policy calling for finality of administrative decisions on which the public, the industry, and interested parties are able to rely with some reasonable assurance.

Further demonstrating Madison's unique history is the fact that our present company, the licensee of WISC–TV, was the original proponent back in 1950 of a proposal that the FCC not put both VHF and UHF commercial channels into Madison together, and that it should restrict commercial television there to the UHF band. This was a a time when there was no TV station nor service whatever in Madison. At that time, all other parties and interests in Madison—including other TV applicants, existing radio stations, and local educators—opposed this WISC counterproposal and argued that the allocation of channel 3 as proposed by the FCC should be made final. The FCC then flatly rejected WISC's counterproposal, and in its

sixth report and order of April 1952, which established the nationwide allocations plan, it finalized the present allocation of channel 3 at Madison. Soon after the FCC rejected two successive requests for reconsideration of its Madison allocations decisions. That allocation of Madison channel 3 is still in the table, 10 years later.

Faced with the early establishment of a Madison VHF station if it applied for a local UHF, WISC in 1952 applied for channel 3 and went through a long and uncertain comparative hearing before FCC deigned to choose the VHF licensee. This enabled Madison's UHF applicants in 1953 to obtain immediate and uncontested grants to build their local stations. Doing so, they soon achieved complete UHF set circulation within their coverage area around Madison, and a 3-year head start over WISC–TV on channel 3. WISC–TV did not receive its construction permit from the FCC until December 1955 (by a Commission decision in which no single Commissioner vote was cast for the competing applicant). WISC–TV commenced regular operations in June of 1956. Meanwhile, the FCC earlier (in November 1954) had rejected out of hand another request to change Madison's allocations by reallocating the local VHF channel 3 (FCC 54–1355).

In recent years—in 1955 and also in 1957—the Commission has held two lengthy rulemaking proceedings in which it again considered and rejected deintermixture of Madison on three separate occasions. First, in 1955, the Commission (in dockets 11238 et al.) generally and completely rejected the overall concept of "selective deintermixture" as too limited and not meaningful to the nationwide allocations problems it purportedly faced (13 RR 1511). Then in 1957, the Commission after rulemaking proceedings dealing expressly with the Madison factual situation, specifically denied Madison deintermixture in the separate Madison docket 11754 (22 FCC 332).

In 1959, the FCC in a report on allocations to the Senate Committe on Interstate and Foreign Commerce wholly rejected the technique of "selective deintermixture," both on an individual city or area basis, as being ineffectual and ineffective to any improvement of nationwide allocations. This was reiterated by it in 1960. We are certain that this committee is familiar with such reports which, to our knowledge, have never been disavowed or revised by FCC.

I is with this background that the FCC has again in mid-1961 reopened for the eighth time in 10 years this matter of Madison's allocations as one of those few moderate-sized cities in which deletion of existing VHF's is proposed. The FCC did so without specifying any valid and sound general criteria on which it selected such cities or markets. Indeed, a number of seemingly comparable other cities/markets are not included by FCC for no apparent reason of distinction. I mention these others (such as Lancaster, Spartansburg-Greencastle, and Johnstown) not to suggest their inclusion, but to demonstrate that—just as the FCC itself admitted in its aforesaid 1959 report to the Senate—"the criteria for selection of the areas for deintermixture are too vague to prevent 'discrimination' as among communities." Further, the FCC has not even set down any criteria pursuant to which it will consider and evaluate parties' comments directed toward the pending deintermixture proposals. This, despite its having been specifically requested to do so by WISC–TV.

WISC–TV has on February 19, 1962 filed voluminous comments before the FCC opposing the deletion of Madison channel 3. I am not here attaching copies of such comments since they are before the FCC and we do not wish to unduly burden the committee's hearing record.

Our friends from Hartford spoke of field intensity measurements. We have had them made, too.

The only thing I am asking, however, to be made a part of the record, or a part of the file, is something we think will be of inteerst.

WISC–TV has retained the services of an expert economics consultant, Prof. Peter O. Steiner of the University of Wisconsin, in connection with the pending deintermixture proposals. Surprisingly enough, it appears that throughout this entire 10-year period, the FCC has never undertaken any comprehensive study whatever of television allocations to determine the economic factors leading to station success or failure, and the role of deintermixture with respect to overall allocations development. This is all the more unusual when it is seen that the current FCC proceedings are purportedly based by it upon economic and competitive factors.

Upon Professor Steiners review of the matter of Madison allocations in the nationwide contex, WISC–TV has requested the FCC to make such an overall study of television development before attempting any final consideration of deintermixture. The Commission has as yet not even responded to this pending request, a copy of which is attached as an exhibit hereto. If the FCC does not conduct such a needed comprehensive study, we respectfully suggest that it might be an appropriate function of this committee to make or insure that one is made. It is difficult to see how a proposal of extreme agency action such as deintermixture can in any way be justified without there having been an appropriate study of the many complex factors involved, so that the FCC could act on established fact rather than on surmise, conjecture, and allegation.

I am also attaching as an exhibit hereto the statement of Professor Steiner, filed as exhibit 2 in WISC–TV's recent comment to the FCC. Professor Steiner again calls for such an FCC study as WISC–TV had previously requested and, in its absence, concludes that all of the limited economic data of overall TV development as is available demonstrates that the entire selective deintermixture technique will not enhance the successful and wider use of UHF channels and is contrary to the FCC's own established goals for further TV development. This Steiner study is perhaps the most intensive exploration of its kind yet made of overall TV development and deintermixture's place—or lack of proper place—in it. Accordingly, it should be of particular interest to this committee.

Among the reasons that have consistently been relied on by the FCC in the past for denying deintermixture at Madison and elsewhere, is the extensive loss of existing service which would thereby be caused to thousands of people in the outlying farm and rural areas who depend on existing VHF service as their only or primary service.

I would like to interject that this morning the gentleman from ABC was the only gentleman I know of, anybody who has filed anything in the Madison matter, who has said there would not be a loss of service. The only difference of opinion seems to be in what amount. And this

afternoon, the presentation by the Maximum Service Group demonstrated very graphically the loss of service to the Madison area.

VHF's coverage superiority over UHF has been shown on a detailed engineering basis all over the United States, including on a number of occasions in our very Madison area. This includes actual measurements on Madison's and many other TV stations which were made for and are included as a part of the so-called TASO report, which was developed with the cooperation and concurrence of the FCC and is now in its files. Yet the FCC has again opened these deintermixture proceedings without making any reference whatever to the TASO report measurements in its files which demonstrate the high costs of channel deletion.

WISC–TV has recently had additional field intensity measurements taken in the Madison area which once again demonstrate these same engineering facts of local VHF coverage superiority and the loss of extensive service on deintermixture. These are included in WISC–TV's comments to the FCC and are not included here so as to avoid burdening this committee's files. But I believe it appropriate to call the committee's specific attention to the practical demonstration of these engineering facts as found in the establishment on a voluntary organization of residents of these outlying areas of Madison. This local group, called the Committee to Preserve Rural Television in the Madison, Wis., Area, has collected a total of almost 32,000 signatures on petitions circulated in the rural areas north and west of Madison of people who depend on Madison channel 3 service and call upon the FCC to deny deintermixture and to reaffirm Madison's television allocations. We understand that Hon. Vernon W. Thomson, Congressman from Wisconsin, has made a copy of the local committee's comments to FCC a part of this record so that there is no need to refer to them further here.

To make the proposed deintermixture even more puzzling, it should be observed that the city of Madison today has more television stations (three commercial and one educational) than any other city in the United States of its moderate size of 125,000 population. There is clearly no underdevelopment of television in our city—they all have network services—such as the FCC asserts it finds in other areas to warrant some hope of further TV expansion. Actually, the Madison market represents the shining example of the intermixed TV system of the United States in which both VHF and UHF stations will operate effectively together. The city of Madison already has the complete UHF set saturation which the FCC insists will solve allocations problems in urging Congress to approve the all-channel legislation. For these additional reasons, the proposed deintermixtures are contrary to the very purposes of the all-channel legislation.

We at WISC–TV support whatever reasonable and effective steps the Congress or the FCC may take to improve UHF generally and to achieve for it nationally the same effective level it has already obtained in cities such as Madison. But this should not be at the cost of destroying important television service that is relied on by thousands of rural residents around these cities where existing VHF's are proposed to be deleted. The American way is to build up to

what is desired and not to tear down what beneficial service has been developed so as to achieve a competitive equality on the bare, minimal level. For these reasons, we urge the Congress in acting upon the all-channel legislation to join with it such formal action as is indicated or necessary to preclude any further FCC application of this illogical, destructive, and unlawful technique of selective deintermixture of operative VHF channels.

I thank you gentlemen very much for the opportunity for appearing before you.

I would like to say this is the first time I have so appeared before a congressional committee. Sitting here today, I have been extremely impressed with this sincere, genuine interest and concern that you have given to everybody's testimony.

The CHAIRMAN. Thank you, Mr. O'Connor. We want to compliment you on the very fine statement that you have made. Certainly with the experience that you have, the information will be very helpful to the committee.

Governor Thomson?

Mr. THOMSON. Mr. Chairman, I wonder if Mr. O'Connor has compiled a list of these seven or eight occasions in which the intermixture was sought by the FCC relating to Madison, channel 3.

Mr. O'CONNOR. I have so compiled them. In order to save time, Congressman, we will furnish them for the record. But they are here. They are extensive. They date back. These are actions. These are not just petitions. The FCC originally proposed—and this was in the nationwide allocations, and then they considered it and turned it down. This is back in 1952. The FCC denied the petitions for reconsideration of Madison channel 3 later in 1952, and so on down the line.

Mr. THOMSON. Mr. Chairman, I would like to request that that compilation be made part of the record at this point.

The CHAIRMAN. You may let it go in the record at this point.

(The material referred to may be found in the files of the committee.)

The CHAIRMAN. Any further questions?

Mr. THOMSON. I have no further questions.

Mr. SPRINGER. Mr Chairman, I would say, in view of Mr. O'Connor's testimony, that as of this moment he is the champion.

Mr. O'CONNOR. Thank you, sir.

Mr. CHAIRMAN. I just want to make sure that the exhibits I requested will be made part of the record.

The CHAIRMAN. Yes; we will receive the statement you made to be filed in the record. We will receive the documents you have there in the files of the committee.

Mr. O'CONNOR. Thank you, sir

The CHAIRMAN. Thank you, it is a pleasure to have you.

(The documents referred to may be found in the files of the committee.)

The CHAIRMAN. Mr. Joseph M. Baisch.

We are glad to recognize the presence of our colleague, Mr. Anderson. Mr. Anderson, we are glad to have you with us. We will be glad to have any comments from you.

STATEMENT OF HON. JOHN B. ANDERSON, A REPRESENTATIVE IN CONGRESS FROM THE 16TH DISTRICT OF THE STATE OF ILLINOIS

Mr. ANDERSON. Thank you very much. Mr. Chairman, members of the committee, as you know, this is the second time this week that I have had the opportunity to appear before this great committee. I must say even at the hour of 6 p.m. in the evening it is a pleasure to be back. I do not intend to add anything to the remarks that I already made before the committee on Monday in support of my bill, which is now pending before this committee. However, it is my very real and great pleasure to introduce to the committee Mr. Joseph M. Baisch, who is the vice president of Greater Rockford TV, the licensee of television station WREX–TV in Rockford. It is my pleasure to do so, not only because he appears in support of the principle of the legislation which I have introduced, but also because he is a very distinguished citizen of the district which I am privileged to represent in the Congress.

I would simply add this, Mr. Chairman. Under his programing direction and leadership, he has really compiled an unexcelled record, I think, of superlative performance for television in our area. He is a very respected, a very distinguished citizen of Rockford, Ill., in my district, and I am very pleased to be able to have this opportunity to introduce him to the committee.

Mr. BAISCH. Thank you, Congressman Anderson.

Mr. SPRINGER. Mr. Baisch, may I say that you have an excellent advocate in your Congressman. He has been looking after your business. He has talked with me on several occasions before these hearings ever started about the problem, trying to understand and know what it was, first of all, and also as to what he thought this committee might do, and as to your testimony here. In that way, I think he has served you well.

Mr. BAISCH. Thank you, sir.

The CHAIRMAN. I might also comment that he made an excellent statement to this committee earlier this week, in which he presented the problem that you had.

STATEMENT OF JOSEPH M. BAISCH, VICE PRESIDENT OF GREATER ROCKFORD TELEVISION, INC., LICENSEE OF TELEVISION STATION WREX–TV, ROCKFORD, ILL.

Mr. BAISCH. I appreciate that, sir. I would like to submit our statement for the record, without taking your time, because I recognize that the hour is late.

The CHAIRMAN. Your entire statement will be filed for the record, and you may give such résumé of it as you desire.

Mr. BAISCH. Thank you, sir. I would like to amplify those remarks briefly. I support Congressman Anderson's bill which has been introduced, H.R. 9291. I would like to address to your attention, Mr. Chairman, that the Commission apparently feels that the prohibition on deintermixture contained in H.R. 9291 and similar bills would unduly inhibit its freedom of action. If this be so, the inhibition is a salutary one in which Congress would be exercising its responsibility to insure the orderly development of television service. It is

conceivable that the Commission might, as it has on some other occasions in the past, as for example in the case of pay television, assure the Congress that it would abandon its current deintermixture proposal in order to avoid the imposition of a statutory restraint in this regard. If the Commission makes it clear that it will not revive this type of proposal again, but will rely upon the all-channel receiver legislation for attainment of its allocation objectives, we have no objection to deletion of section I of Congressman Anderson's bill.

Sir, I would like to explain——

Mr. SPRINGER. No objection to the deletion of what?

Mr. BAISCH. To the deletion of section I of Congressman Anderson's bill, sir.

Mr. SPRINGER. What is that section?

Mr. BAISCH. It deals with deintermixture, sir.

Mr. SPRINGER. What is going to remain?

Mr. BAISCH. The all-channel legislation, sir—all-channel sets would become available under the legislation, but there would be no legislation on deintermixture.

I can explain our position best by addressing myself to the contrast between our position and that of the ABC Television Network. There are some things we did agree with. For example, when Mr. Goe admitted that deintermixture will not encourage the expansion of UHF-TV, we do agree with this particular position. However, there is one very sharp contrast that I do not think that the ABC television presentation recognized, and that is what we would term localized television service. I am talking about local localized service, rather than network service.

Now, I would concede that all networks do a fine job. We have some programs from ABC, with whom we are affiliated, as well as from CBS, with which we are also affiliated, that we are very proud to have on our schedule. On the other hand, in the support of the opposition to the removal of VHF channel 13, we have in our area in excess of 113,000 people who have expressed themselves through post cards, through letters, through petitions, and through resolutions that have been adopted in opposition to the removal of WREX-TV's VHF channel 13. That number again: 113,000.

Now, these people were interested primarily in the localized television service—news and weather and localized information programs, women's programs, special programs, spot announcements, and publicity that are directed to meet their local needs and desires—which the network does not and cannot, as a matter of fact, in a practical sense provide, but which we, as a local station, do provide to the people in the rural areas outlying and beyond that 35- and 40-mile circle. These people would be denied this localized television service, which no one else would be able to provide to them if VHF channel 13 were removed.

I would like to thank the committee for the opportunity to present my statement. I have tried to keep it brief. As Mr. O'Connor has explained in his appearance, it is the first time that he has been before a group of this type; this is also my baptism of fire. I have enjoyed learning how the process really works, democracy in action. I have enjoyed it, thank you.

I would like to leave a copy of our comments in the Commission proceedings for the committee to have at their disposal in their files. They reflect the comments of the people in the area affected.

The CHAIRMAN. Thank you, Mr. Baisch; we will be glad to receive your volumes for the files of the committee. Your statement in its entirety will be included in therecord.

(The full statement of Mr. Baisch follows, and the documents referred to will be found in the fields of the committee:)

STATEMENT OF JOSEPH M. BAISCH, VICE PRESIDENT AND GENERAL MANAGER OF TELEVISION STATION WREX-TV, ROCKFORD, ILL., ON H.R. 9291

I am Joseph M. Baisch, the vice president of Greater Rockford Television, Inc., the licensee of television station WREX-TV, Rockford, Ill., and the general manager of that station. I appear before you today to urge the enactment of H.R. 9291, a bill introduced by our own local Member of the House, Representative John B. Anderson, of Illinois, of the 16th Congressional District. This bill would prevent the Federal Communications Commission from taking action to move our operating channel to the UHF—a step which would actually affect not only our station but also hundreds of thousands of our viewing public. In addition, we believe that the legislation is essential to the continued healthy development of television service in the United States.

As you know, the Commission last year issued a series of proposals looking toward expanded use of the UHF portion of the television spectrum. Among the steps proposed was a plan to delete VHF channels from eight cities, including Rockford. The stations presently operating on these channel would be shifted to the UHF. There was an immediate reaction from the public against this proposal. H.R. 9291 and the similar bills introduced by other Representatives were introduced in order to prevent the Commission from taking such action which would be an obviously inequitable distribution of television service.

Congressman Anderson's bill contains an equally important provision which we support with equal vigor. This provision would authorize the Commission to require that all television receivers traded, shipped, or transported in interstate commerce be capable of receiving UHF as well as VHF transmissions. The essential purpose of the bill, as a whole, is to make provision for the orderly expansion of television service in the United States without depriving substantial segments of the public of valuable television service, service which they have invested substantial sums to receive, and service on which they have come to rely.

We recognize that the Commission itself is vigorously urging the enactment of legislation which would permit it to require the production of all-channel receivers. The essential difference between the legislation urged by the Commission and H.R. 9291 concerns the steps which may be taken by the Commission during the interim period while the effects of all-channel receiver legislation are taking place. I believe that great harm to the public would result if, during this interim period, the Commission were to delete VHF channels, and that the corresponding benefits, if any, would be negligible.

As I have indicated, this proposal to delete our VHF channel has evoked an unprecedented outcry from the viewing public in the area around Rockford. Greater Rockford Television, Inc., on February 19, 1962, filed with the Commission extensive comments in opposition to the proposal to deintermix Rockford. They included a careful engineering analysis of the effects on the viewing public of the deletion of VHF service in the Rockford area and they submitted the results of scientific audience surveys which corroborate that such action should have extremely harmful effects. Finally and most important, our comments contained copies of thousands of letters, postcards, and petitions from the public which would be affected. All but a small handful oppose deintermixture for reasons which I will describe. The comments contain copies of formal resolutions adopted not only by social and civic organizations in the communities which presently rely on WREX-TV for service, but by the governing bodies of virtually every community within the WREX-TV service area. A copy of these comments, which I could not summarize adequately here, has been lodged with this committee. I trust that it will be helpful in bringing home the enormity of the action contemplated by the Commission.

The Commission concedes that the proposal to delete VHF channel 13 from Rockford and to require WREX–TV to operate on a UHF channel would deprive hundreds of thousands of viewers of our valuable television service. Although it operates in the VHF, WREX–TV was established as a permanent part of the Rockford area "family of cities" only by very great effort and, initially, through a very substantial financial loss. Rockford is surrounded by much larger metropolitan centers—Chicago, Milwaukee, the Quint Cities market: Davenport, Iowa, and Rock Island, Ill. In these cities are located VHF television stations which are important outlets for the national networks, as well as for national and regional advertisers. The existence of these stations served as a strong impediment to the establishment of WREX–TV. The station was established only after an intense struggle, even though it had the backing of some of the most responsible leaders of Rockford as stockholders. The better portion of a quarter of a million dollars was lost in the operation of the station before the profit and loss statement started to reflect daylight. The early days of WREX–TV were extremely trying and hectic. And yet today, though it has arrangements with national networks, WREX–TV carries many unsponsored programs and unsponsored portions of network vehicles. Spot advertising schedules are lacking, and national advertiser budget allocations are difficult to come by. The pattern of advertisers buying the top 10 markets, the top 25 or the top 50, for spot advertising poses a difficult obstacle for stations in markets such as Rockford, which are only in the top 89 to 97 markets of the country.

Shifting WREX–TV to the UHF would result in severe economic losses for the station. Its VHF transmitting and antenna equipment, which represents an investment of over $350,000 would become obsolete overnight. Over $325,000 would have to be invested in new UHF replacement equipment. Existing film contracts purchased on the basis of our VHF service area have committed us to payments in excess of $350,000 through 1967, sums which would be totally unrealistic for the limited coverage and audiences available to a UHF operation.

The effect on WREX–TV, though grave, pales in significance when the effect on the public is considered. In light of the obstacles which I have described, it was early decided that the successful operation of WREX–TV depended entirely upon the provision of program service carefully designed to serve the specific needs of persons residing in the numerous small communities and rural areas surrounding Rockford. This audience which resides as far out as 60 miles from Rockford, received then and receives now no such local service from the television stations located in the large metropolitan centers of Chicago, Milwaukee, and the Quint Cities. Stations in these large cities naturally concentrate on the large populations in the principal cities which they serve and as a consequence disregard the rural areas which are the backbone of our own service audience. It was only by complete identification with this large and unserved audience that WREX–TV could develop the necessary viewer loyalty to create an audience attractive to the advertisers on whom the station must rely for its economic support. The comments which we have filed with the Commission describe the nature and extent of the service which WREX–TV has provided on an areawide basis. The resolutions of governing bodies and other organizations plus the thousands upon thousands of communications from the viewing public bear eloquent witness to the success of this service and effort, and to the extent to which these viewers, organizations, and communities rely exclusively on WREX–TV for service geared to their special local needs and interests. Such service is not provided by any other station, including the UHF station in Rockford, which was in operation even before WREX–TV went on the air.

Deintermixture in Rockford would be catastrophic for these viewers. Even in Rockford and in all of Winnebago County—where a very high proportion of the public can receive UHF transmissions—the effect of deintermixture would be harsh. For even here, viewers would receive a degraded signal compared to the current signal of WREX–TV. Many would have to invest substantial sums to receive a new UHF channel because many receivers which do receive UHF are so constructed or converted that they can receive only one UHF channel. In order to receive a new or a second UHF channel a relatively expensive modification of the receiver must be made even in close-in areas.

But in the outlying areas, the effect is much more serious. There, deintermixture would result in total deprivation—I repeat—total deprivation of WREX–TV service for almost all viewers. Many who now rely on WREX–TV reside entirely beyond the range of UHF service. These persons could do nothing, nothing at

all, to get a UHF transmission from Rockford. For others, who reside within the theoretical range of UHF service, the expensive conversion to receive a UHF signal from WREX–TV might run as high as $200—even higher. In no case would the expenditure be insignificant. Many of these persons have had experience with UHF transmissions currently available, and that experience demonstrates that UHF service is badly degraded. In many locations it is not available at all. The communications from the public, as well as the surveys which we have conducted establish conclusively that very few would or could convert to UHF. This is particularly true because VHF service is available from Chicago, Milwaukee, Davenport, or Rock Island in very large parts of the area under discussion. Although that service is not local for these viewers, its existence is a serious deterrent against the expenditure of substantial sums in order to receive a degraded local UHF signal.

The fact that there would be very little conversion in order to receive UHF transmissions of WREX–TV is critical, not only because it means the actual loss of local service to very many viewers, but because it establishes that deintermixture in Rockford will not help significantly to achieve the Commission's aims. I cannot overemphasize that the current deintermixture proposals by the Commission are admittedly designed solely to foster the expansion of UHF in this country. Each of the notices of proposed rulemaking which bear on this subject makes this abundantly clear. These deintermixture proposals are not like those that the Commission has adopted in the recent past. Deintermixture in such communities as Springfield and Peoria, Ill., was not intended to stimulate the growth of UHF in the United States, but to alleviate local competitive problems in those communities. There has been no suggestion by the Commission that the proposal to deintermix Rockford is motivated by similar considerations. Indeed, there has been a UHF station in existence in Rockford even longer than there has been a VHF station. That UHF station, I venture to state, is as highly commercialized as any television station in the United States, and there has been no complaint that the Rockford UHF station is losing money.

The Commission has on several occasions in the past considered "selective" deintermixture in specified communities or areas as a possible means for stimulating the expansion of UHF service. On every occasion that it has been considered, the Commission has rejected this solution because it would not bring about the desired end. In his testimony before the Senate committee in support of all-channel receiver legislation on February 20 of this year, Chairman Minow of the Commission repeated again the Commission's view that selective deintermixture, and I quote, "offers no permanent solution." He also indicated that the United States cannot have an all-UHF television system. He stated the Commission's current belief that both VHF and UHF channels must be utilized, particularly in densely populated portions of the country, to achieve the Commission's allocation objectives.

The information set forth in the comments filed with the Commission by Greater Rockford substantiates the conclusion that deintermixture in the Rockford area would not significantly affect the expansion of UHF service in this country. Rather there would be created a very small additional market for UHF receivers or converters, which could hardly provide a genuine stimulus to manufacturers for the production of such equipment or, indeed, to advertisers to utilize the facilities of UHF stations. What I am trying to say is that deleting the VHF channel from Rockford will not result in any substantial expansion of UHF. At the same time, it will deprive great numbers of viewers of the service of WREX–TV on which they rely almost exclusively, and have the most serious economic impact on WREX–TV itself.

Clearly the most effective and orderly means for stimulating expansion of the UHF lies in the all-channel receiver proposal. In taking this position we agree with the Commission. However, we most strongly urge that the prohibition on deintermixture contained in H.R. 9291 is equally vital in the quest for solution of the nationwide allocation problems. Without it, the Commission may create catastrophic dislocations while the effects of the legislation are being felt. It would be unconscionable to impose on the viewing public the disruption and deprivation of service which deintermixture entails, when, in a few years the UHF will expand normally with the purchase by the public of sets capable of receiving UHF transmission. These dislocations and deprivations will not help achieve the ultimate objective.

Problems such as this are the traditional and legitimate concern of this committee and the Congress. Congress, in section 307(b) of the Communications

Act, set forth the standard which governs the allocation of broadcast facilities. Congress has in the past changed that standard. When the Communications Act was established, Congress was dissatisfied with the allocations principles when applied by the old Radio Commission and retained the so-called Davis amendment, codifying the legislative intent on the manner in which section 307(b) should be applied. A precise standard for the allocation of radio broadcast facilities among the various States and communities to insure equitable distribution of such service was embodied in the Davis amendment. Both the adoption and abandonment of the Davis amendment were congressional acts based on considerations much like those being discussed now before this committee. The effect of the Commission's proposal to delete these VHF channels would be to deprive rural cities of VHF service while the large cities of the United States retain such service. This committee and the Congress have also considered and taken action with respect to other specific allocation matters of broad national interest, such as the problem of the clear channels.

The Commission apparently feels that the prohibition on deintermixture contained in H.R. 9291 and similar bills would unduly inhibit its freedom of action. If this be so the inhibition is a salutary one, in which Congress would be exercising its responsibility to insure the orderly development of televsion service. It is conceivable that the Commission might, as it has on some occasions in the past, as for example in the case of pay television, assure the Congress that it would abandon its current deintermixture proposals in order to avoid the imposition of a statutory restraint in this regard. If the Commission makes it clear that it will not revive this type of proposal again, but will rely upon the all-channel receiver legislation for attainment of its allocation objectives, we have no objection to deletion of section I of Congressman Anderson's bill.

Before closing, we of WREX-TV wish to express our appreciation to Congressman Anderson for his efforts in behalf of the people of the 16th Congressional District of Illinois. We recognize that allocation of television channels can become a very complicated matter, and that frequently the Congress or an individual Congressman might be reluctant to explore what some consider an esoteric area. However, Congressman Anderson has grasped, and acted on, the single overwhelming fact that comes through the maze of claims and counterclaims concerning engineering, economic, and other technical considerations. The single overriding consideration was best stated by him when he introduced H.R. 9291, as follows:

"I believe it to be my duty to do everything I can to protect the people in my district against the loss of their channel 13 television service. The FCC has indicated that it intends to take their channel 13 service away from them. If this is the case, we in the Congress must step in to make sure that such a tragedy does not occur."

There is a legislative drafting problem involved in the Anderson bill to which I would like to refer. The purpose of the Anderson bill is to prohibit the deletion of operating stations. I do not believe that Mr. Anderson intended the bill to apply to situations where a station was not yet on the air and the Commission seeks to change its channel. Obviously the public interest considerations involved where no existing station is on the air are different from the situation presented in Rockford. Accordingly, it is my suggestion that section I of his bill be revised to prohibit only the deletion of the assignment of any operating television station on any television frequency between 54 and 216 megacycles—the VHF band.

One other problem remains. The Commission has, from time to time under meritorious circumstances, permitted the shift of a VHF channel from smaller communities unable to support their own stations to larger communities which would continue to serve the smaller cities. This does not really involve the deintermixture problem since the station will continue to operate in the VHF. In such cases, all that remains for assignment in the smaller community is a UHF channel. I do not, therefore, believe that this power should be taken away from the Commission, particularly where the operating VHF station consents to the move. Accordingly, I would add at the end of section 1 of Congressman Anderson's bill the words "except that this section shall not apply where an operating VHF station consents to a channel reassignment."

These changes would eliminate problems raised by others which I do not believe are germane to the purposes of Congressman Anderson's bill. With these changes, I do not believe that there is any legitimate objection to the legislative proposal which has been made by Congressman Anderson.

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The CHAIRMAN. I might say that personally I am glad that you and many others have come here today. I think it is wholesome that so many of you throughout the United States have been here during all of this week and observed the workings of the legislative process. It gives you a little clearer idea of some of our problems.

As I said to Mr. Lindow earlier in the afternoon, I recognize your problem. I think we could do something about it, if we will all work together on it. But I doubt very seriously whether it is wise to try to force something that is doubtful, whether it will ever get through all the way as a matter of legislation. My viewpoint is if you have an objective to accomplish, it would be better and certainly wiser to use a course that can be successful. A few people in the broadcasting industry are tremendously concerned about these problems, and if you can see your way clear to cooperate with the committee, I believe firmly that we can work something out on it.

Mr. BAISCH. Sir, if the Commission gives you their assurance that they will abandon the idea of deintermixture, and will not revive it at some time in the future, I believe that we can delete section 1 of Congressman Anderson's legislation without any further problem.

The CHAIRMAN. I personally have some apprehension about tying the Commission's hand completely. But there are adjustments, as I have said earlier, that have to be made from time to time. Experience has shown that in the relatively short time that we have had television. And to completely tie the Commission's hands where they could not make adjustments in the public interest, I don't believe, would be a wise policy.

And I think we would run into all kinds of difficulty. As I said to Mr. Lindow, I think the entire broadcasting industry ought to give a little thought to this, since we are going into this, in view of the record over the years. If we get into a tangle such as the unfortunate thing that happened in the House yesterday, I am afraid that this thing will go down the drain just like that did. And I think we should think the matter over pretty thoroughly.

Mr. BAISCH. We are moving for legislation concerning the UHF–VHF problem, and I think it is pretty much agreed from the course of these subcommittee hearings that we are moving for UHF–VHF legislation that would permit and establish intermixture.

We have already arrived at intermixture in Rockford, Ill., right now, sir.

The CHAIRMAN. As I said earlier, it appears that there are some people that think that everybody ought to be able to make as much money out of their venture as somebody else in the same venture.

Mr. BAISCH. I don't think this is possible, sir, under the competitive system.

The CHAIRMAN. Certainly, that is true in radio: you are not going to dispose of all the small radio stations in the country because there is a large one operating that covers the same area. I don't think the public interest would require that.

Mr. BAISCH. No; and I think the same thing would hold true in television.

The CHAIRMAN. Thank you very much. We do appreciate your being with us.

Mr. SPRINGER. I want to congratulate you. You did bring out something that hasn't been emphasized too much. One of the agricultural organizations brought it out in a statement which was put in the record, and that is the wide service that is so necessary for rural areas.

Mr. BASCH. We cooperate with 4–H'ers and the FFA and not only agricultural groups but also religious, educational, and service organizations and veterans' groups through the entire territory, and it is their case that we submit here to the committee.

I thank you again, sir.

The CHAIRMAN. We are glad to have both of them.

The CHAIRMAN. The next witness will be Mr. L. M. Sandwick.

Mr. Sandwick is the staff director for the Consumers Products Division, Electronics Industries Association.

STATEMENT OF L. M. SANDWICK, STAFF DIRECTOR, CONSUMER PRODUCTS DIVISION, ELECTRONIC INDUSTRIES ASSOCIATION, ACCOMPANIED BY JAMES D. SECREST, EXECUTIVE VICE PRESIDENT

Mr. SANDWICK. Mr. Chairman and gentlemen, the gentleman on my right is Mr. James D. Secrest, the executive vice president of the Electronic Industries Association.

The CHAIRMAN. You may proceed.

Mr. SANDICK. My name is L. M. Sandwick. I am staff director of the Consumers Products Division of the Electronic Industries Association.

Before joining the EIA staff on January 15 of this year I spent 32 years in entertainment electronic industry sales and management. My last industry position was vice president in charge of sales of the Pilot Radio Corp., a job I relinquished on January 12, 1962.

I am testifying today on behalf of the television receiver manufacturers in our association. EIA, whose 350 member companies produce all types of electronic equipment and components, is the only national organization representing TV set producers.

So that there will be no misunderstanding as to whom we represent, the following receiver manufacturers are members of our Consumer Products Division: Arvin Industries; Delco Radio Division; General Electric Co.; Magnavox Co.; Motorola, Inc.; Olympic Radio & Television; Packard Bell Electronics; Philco Corp.;Pilot Radio Corp.; Radio Corp. of America; Sylvania Electric Products, Inc.; Trav-Ler Radio Corp.; Warwick Manufacturing Co.; Wells-Gardner Electronics Corp.; and Westinghouse Electric Corp.

The Consumer Products Division on several occasions has voted in opposition to the all-channel legislation proposed by the FCC, with RCA abstaining, since the congressional hearings on this legislation have started, RCA is testifying in support of the legislation with reservations. To the best of my knowledge no other receiver manufacturer, including nonmember companies, has formally approved the bill proposed by the FCC.

For many years, our association has cooperated with the Federal Communications Commission in the advancement of both radio and television. Among our achievements was the sponsorship of the two

national television system committees which recommended transmission standards to the FCC for both monochrome and color television. Recently, we organized and financed studies which led to the adoption of FM stereo standards by the Commission.

The manufacturers of television receivers are grateful for an opportunity to explain to this committee reasons for opposing any legislation which would compel the industry to produce only all-channel equipment and consumers to pay more—as much as 14 percent more by our estimate—for their TV sets. We shall not repeat here our protest against the broad grant of power H.R. 8031 would authorize, since the Chairman of the Federal Communications Commission, as we understand it, agreed before the Communications Subcommittee of the Senate that the identical Senate bill (S. 2109) should be revised to confine the FCC's authority specifically to all-channel set production. We applaud this concession but we believe that even the amended legislation is unnecessary, will be ineffective in accomplishing its objective, and would penalize both manufacturers and consumers.

At the same time we want to elaborate on our proposal to the Senate subcommittee that EIA stands ready to cooperate fully in a joint effort of Government and industry to make UHF an effective medium and truly competitive with VHF in our national television system. But first permit us respectfully to suggest that members of this committee carefully review the list of witnesses who have come out in support of H.R. 8031, and ask themselves why no spokesmen for the consumers—the buyers of TV sets—have asked you to enact such a law. We suspect—although we do not know—that Members of Congress have not received any great volume of letters—if any—from consumers urging the passage of this bill. We are referring, we must emphasize, to the general public across the country and not to televiewers in the eight areas presently proposed for deintermixture. Furthermore, we believe that the support of legislation by televiewers in these eight areas expresses their opposition to deintermixture and does not constitute public endorsement of all-channel set legislation.

Of course, the obvious retort might well be that you have received no great amount of mail from consumers opposing the legislation either. The reason this is so, we believe, is that the vast majority of televiewers are blissfully unaware of the impending threat to their buying habits and their pocketbooks. In fact, I daresay the average set owner in a VHF only area has little or no knowledge of the UHF–VHF problem although he may well be dissatisfied with his limited choice of programs if he lives in a one- or two-station community.

As Chairman Pastore and other members of the Senate subcommittee noted, the broadcasters who support this legislation are making no sacrifice to do so. The support of educational and UHF broadcasters is understandable but we believe the choice of the methods to be mistaken.

Television receiver manufacturers are just as interested as anyone in seeing UHF grow and prosper and the number of educational TV stations increase. However, we should like to point out that 52 percent of the VHF channels reserved by the FCC for educational broadcasting are still not in use. This failure to utilize these priceless facilities certainly is not due to any shortage of VHF sets.

We investigated on a field trip an area cited by the FCC Chairman as a "chilling" example of a UHF failure due to a lack of UHF-equipped receivers. We also investigated other areas where UHF has succeeded—even in competition with VHF—and we are firmly convinced that the panacea to the problem is not restrictive legislation but rather a determined effort by the entire television industry to make UHF work.

As we told the Senate subcommittee, the Electronics Industries Association's Consumer Products Division plans to undertake a program to promote the growth of UHF in the belief that it is only through voluntary action, rather by law, that this largely unused broadcasting medium can be expanded. Now we wish to carry this voluntary plan further and respectfully to suggest to this committee how a Government-industry program on behalf of UHF might be launched.

The self-interest of set manufacturers in expanding TV broadcasting is readily identifiable. The greater the multiplication of television services, the more receivers they sell. But the people I represent are citizens as well as businessmen. They want the higher quality and broader choice of programs attainable through expansion of service and increased competition for audiences. They want this for themselves and their families. And especially for their children, and their grandchildren, they wish the full flowering of educational television.

Since we in the set manufacturing business recognize that only through the growth of UHF can television broadcasting expand, why, you well might ask, do we oppose legislation which others think will achieve our universal objective? Our reason is quite simple, gentlemen. We don't believe the bills before you will work because we don't believe any real correlation has been or can be shown between the withering away of ultra high frequency broadcasting and the availability of equipment to receive UHF signals. This being the case, what possible magic can there be in legislation to require the manufacture of only all-channel receivers?

The extension of television broadcasting through full utilization of UHF frequencies cannot be achieved; in our view, by an agency of Government alone, even by one as dedicated as we know the Federal Communications Commission to be. The FCC has been wrestling with problems of UHF for years and today does not appear much closer to that solution than it was at the beginning. But this is no fault of the FCC.

For one thing, part of UHF's troubles can only be resolved by educational means and a Government agency is not always well suited for the conduct of education or promotion programs. But this is not the FCC's basic handicap. Its disability fundamentally is attributable to the fact that UHF's problems cut through the interests of many gruops—broadcasters, set producers, equipment distributors, dealers, and the public. Up to now the tendency of necessity has been to try to solve UHF's problems by separate approaches to individual parties concerned and each, quite naturally, has tended to think parochially in terms of its own needs. UHF's difficulties, we are convinced, can be resolved only after a mechanism has been established for their consideration as a whole and in an atmosphere in which each party can be induced to reconcile its interests to the advancement of the common cause.

Our proposal, gentlemen, is that an organization be established which might be called the Government-Industry Committee for the Promotion of Ultra High Frequency Broadcasting and on which all interested parties, with the public most certainly included, would be represented. Impetus for organization of such a committee, we believe, should be provided by the Interstate and Foreign Commerce Committee of the House and the Commerce Committee of the Senate under whose joint aegis it would perform its tasks.

Only an agency of Congress, we believe, can bring about the formation of such a committee. Were the FCC, or the set manufacturers, or the broadcasters to issue a call for its organization, we doubt that the response would be substantial. We think the authority of Congress is essential to bring into being the kind of organization we have in mind, set forth for it the broad outlines of its responsibilities, oversee its activities, and keep it steadfastly at work.

As working members of this Committee we recommend the most highly qualified persons, technically, and otherwise, from the Federal Communications Commission, the broadcasters, the set manufacturers, and the equipment distributing industry. We would assume the public would be represented by the Commission and Congress, but distinct public representation might be advisable, particularly for the segment of the public directly concerned with education.

The Committee could form task forces to work on various phases of the overall UHF problem. One would be composed of the best technical brains of the FCC, the broadcasters, and the set producers and would be charged with overcoming imperfections in the UHF signal. This group could examine the problem from both the standpoint of transmission and receiver efficiency and would tie in closely with UHF experiments now being conducted by the FCC in New York City.

Another Committee task force of Government and industry specialists might be made responsible for finding solutions to UHF problems through a wise and lasting TV channel allocation plan. Its members would be instructed to keep in mind the central goal—the development of a workable frequency assignment program contributing most effectively to the creation of a national television system. Parochial interest would have to be made secondary to this objective.

To a third task force could be given the job of educating broadcasters, distributors, and dealers as to how UHF can be made to succeed. Field investigations recently undertaken by me made it clear that many of UHF's difficulties can be traced to the inability of broadcasters to generate audiences through effective selling and program promotion. My inquiries also disclosed that distributors and dealers in UHF–VHF areas sometimes are disinclined to push the sale of equipment capable of receiving UHF due to difficulties of installation and servicing. It often takes special antennas to receive a good UHF signal and a great deal of patience to tune for a satisfactory image. Selling UHF equipment, therefore, involves the risk of frequent service calls and customer complaints. It is easier to induce the customer to buy a VHF set and forget about the UHF station in town.

Assistance to the broadcasters with their programing and promotional problems, and education to overcome dealer resistance to UHF, coupled with programs to train servicemen in UHF set installations,

are absolutely essential to UHF's success. But something else will have to be done if UHF is to be unlocked for the expansion of television broadcasting. One of the committee's task forces would have to see that the successes of UHF—and there are some outstanding ones—become widely known in detail not only for the guidance of present and future broadcasters but to demonstrate to investors that UHF does have a future. Unless venture capital can be attracted to UHF, there can be no prospect for its progress short of abandoning freedom of enterprise in the broadcasting industry.

The Government-Industry Committee will not be successful unless it has the full and active support of the FCC and industry from the very top. We, therefore, urge, if you believe our proposal has merit, that the chairman of the Commerce Committees of the House and Senate, or Members designated by them, issue an invitation to a meeting at the Capitol to the members of the FCC, the presidents of the three networks, and the presidents of all set manufacturing companies, and principal spokesmen for the UHF broadcasters, for the National Association of Broadcasters, for the Electronic Industries Association, for the Association of Maximum Service Telecasters, for the National Association of Educational Broadcasters, for the National Educational Television and Radio Center, and for the National Appliance and Radio-Television Dealers Association. These Government and industry representatives, and others you may see fit to add, might be asked to bring with them their chief technical assistants.

The two committees of Congress would give this Government-In-Industry Committee its general instructions. These would include the results the committee was expected to accomplish and in what UHF problem areas, broadly speaking, it would be expected to work. These could include areas I have indicated or others which may occur to your commmittees. Additionally, and I think this is most important, the Government-Industry Committee should be required to report back to Congress with a workable program within 90 days or some reasonable period.

The Electronic Industries Association has made a start at tackling the UHF problem. As a matter of fact, the EIA Consumer Products Division has been concerned with the problem for some time, but felt it should not decide what its role ought to be until the FCC had an opportunity to detail its own program for expanding the use of UHF. But recently mounting pressures for the legislation before this committee made it necessary for us to take a positive course of action. The first step was the field investigation referred to earlier in my remarks. The next step will be taken at the meeting of the executive committee of the division March 15 when UHF will be given top priority on the agenda.

Among proposals to be considered will be a short-term program to make certain that there is no question about the availability of equipment to receive UHF as each new station comes on the air and to foster proper installation of UHF receivers.

But the EIA Consumer Products Division can work only at the fringes of the problem of fostering ultrahigh frequency broadcasting. A frontal, comprehensive attack is required, and this can be made only by a body of the sort we have proposed, summoned by the authority of Congress and given its general direction on behalf of all of the American people.

Equipment to receive UHF always has been available. In 1953 nearly 1.5 million UHF-equipped sets were produced, or more than 20 percent of total TV receiver output. But last year's production was only 370,000 of such sets, or 6 percent of the total. Does this mean that the manufacturers simply were indifferent to the sale of UHF equipment? Certainly not. It simply means that production of UHF equipment followed the decline of UHF broadcasting.

We think the figures cannot be interpreted otherwise. Historically, the home receiver or player has invariably followed the availability of the program. There had to be records before people would buy phonographs. There had to be AM and FM radio and television service before people would buy sets. And, more recently, stereo receivers and adapters did not become available until FM stations had installed transmission equipment and were broadcasting stereo programs.

When the Chairman of the Federal Communications Commission said that the UHF stations are "silent in some 83 areas for lack of equipment to receive their signals," we wondered how one was to account for the "great success" of UHF in other areas. Could it be that the receiver industry preferred to make sales in places like Fort Wayne, Ind., and Peoria, Ill., while scorning the business of the citizens of cities like Allentown, Pa.? This was an interesting question for a man whose years in this business had left him with the distinct impression that nowhere would he find keener competition or more aggressive selling. So my field investigation included a trip to Allentown and Wilkes-Barre, Pa., in the former to get a firsthand story of one of the "chilling" UHF failures cited by the FCC Chairman, in the latter to learn why Wilkes-Barre and Scranton, Pa., 16 miles away, could be numbered among the successes.

First, let me assure you that equipment availability had absolutely nothing to do with either the success or the failure. Allentown's WFMZ–TV failed because it could not obtain network affiliation to give it a chance to compete with the VHF network stations in Philadelphia which, incidentally, were given FCC authority to increase power and raise transmission towers, a circumstance which enabled them to be received in Allentown like a local telecast. The Wilkes-Barre and Scranton UHF broadcasters succeeded because they were able to give televiewers the choice of three networks protected by the hills from interference from either Philadelphia or New York.

I also looked into the story of WLKY, a commercial UHF station in Louisville, Ky., whose operators in just 4 months were able to obtain 50 percent conversion of televiewers' sets in this formerly all-VHF area. I found that they plugged local public service, sports, and news programs hard; that they had a primary network affiliation, and that everyone on the staff handles two jobs, so they are now on their way to success. And why not? All of the elements of success are present—initiative, resourcefulness, sustained effort, and a certain commodity called salesmanship.

If all-channel set legislation is to be inevitable—and this we cannot imagine—it seems imprudent to us to enact a bill now when a number of technical problems related to UHF signal characteristics remain to be solved. These are well known to you. Were these difficulties not substantial, Congress would not have authorized the FCC to spend

$2 million on UHF studies now underway in New York City. A wise course, it seems to us, would be to defer any consideration of set legislation at least until the FCC studies have been completed and the findings published. It is possible that UHF will be found impractical in New York. Should that be the case, passage now of H.R. 8031 or a similar bill would mean that buyers of new sets in the Nation's largest city would be required to pay for tuners for which they would have no use.

This seems to be an appropriate point at which to review my report to the Senate subcommittee on what all-channel legislation will do to the consumer's pocketbook. The present average retail selling price for TV sets, according to the best estimates I have been able to obtain, is $212. This would be increased by $30 if any of the all-channel bills are enacted. This would mean, if the present sales level of 6 million sets a year could be maintained at the higher price, that the public would be paying $180 million more for television receivers annually. At least half the purchasers never would have occasion to use UHF tuners during the life of their sets.

Many consumers, however, will have to increase their TV investment by considerably more. This is because in many areas—mountainous country, big cities like New York, cities on rolling terrain as is much of Washington—satisfactory UHF signals cannot be received with indoor antennas. Some purchasers will have to add UHF "bow ties" to present outdoor antennas. Others will find it necessary to install more efficient all-band antennas. And in places where reception is especially difficult to obtain, due to topography or distance from transmitter, high-gain outdoor antennas will be needed.

If I may digress for just a moment, Mr. Chairman, I would like to point out to you that although you have a very fine picture of channel 26, WETA, the ultra high frequency educational station in Washington in this hearing room with an indoor bow tie on the other side of the Capitol Plaza at the Senate hearing room it was necessary to install just such a high gain antenna tower to get it at all.

Such equipment, depending upon the type required, costs from $14 to $35 with installation charges ranging from $15 to $25.

I am very conscious of those costs, Mr. Chairman and gentlemen, because I had to equip my own set here in Washington when I moved from New York, to hear channel 26, and the total bill was $74.60. Although I lived in Washington, I couldn't get the station without a rooftop antenna.

The addition of $30 to the average retail price of a television receiver represents a price increase of nearly 14 percent. The industry has reduced prices that much, but never has made so large an increase; so we have no directly applicable experience with which to determine its effect upon our business. We have found, however, that, as a general rule, a 1 percent price increase brings an equivalent decline in sales volume unless an immediate compensating advantage is provided. In other words, a 14 percent price rise could bring 14 percent loss in business for a time at least, and many people might be thrown out of work. The drop in sales, meanwhile, could cost the Federal Government millions in excise taxes.

Moreover, because many prospective buyers would be postponing purchases, the process of getting the country on an all-channel basis would be prolonged considerably beyond the 10 years it would take

to replace the nearly 60 million television sets now in use at the present sales rate of about 6 million receivers a year.

We cannot believe, gentlemen, that legislation will solve the UHF problem. We submit, moreover, that no law, however skillfully drawn, can inject initiative, salesmanship, and imagination into this or any other industry or business enterprise.

Finally, we are certain that enactment of any bill which will have the effect of requiring consumers to purchase something they may not want and may never need will in no way solve the dilemma of UHF versus VHF telecasting. We believe that only when government and industry evolve and activate, under the watchful eye of the Congress, an effective voluntary program will the American people be given the balanced national television service they deserve. We, therefore, respectfully urge your immediate consideration and favorable action on the proposal presented in this testimony.

And thank you very much for hearing our views.

The CHAIRMAN. Thank you very much, Mr. Sandwick, for your statement, representing the Electronic Industries Association.

Did I understand that you have 350 members of your association?

Mr. SANDWICK. Yes, sir. I specifically read, I believe, into the record the exact list of what are known as OEN producers—in other words, manufacturers of the complete product—and I also mentioned that they had discussed this matter at previous meetings.

The CHAIRMAN. How many produced television sets?

Mr. SANDWICK. Approximately 15—15 is exact.

The CHAIRMAN. I suppose you know that some manufacturers have testified that they supported this concept.

Mr. SANDWICK. I know the Radio Corp. did, because I was here this morning, and I had been advised that they would, with reservations, and they so stated for the record, Chairman Harris.

I wasn't aware that any other manufacturer, whether a member or not, had so testified.

The CHAIRMAN. I am beginning to agree with the philosophy that you present.

Mr. SANDWICK. Thank you very much, sir.

Our thought there is that there are four elements involved: the U.S. Government, which is the guardian of the frequency spectrum; the public, which uses that portion of the spectrum which is allotted for educational and entertainment purposes; the broadcast industry; and, fourth, the makers of the sets.

And if together they will act in a statesmanlike way with good will, we can solve this problem.

The CHAIRMAN. I wish I could have that confidence, because, frankly, I admit that I am not too impressed with your suggestions as to how it can be met. This business of setting up committees is a very good thing, and I think we ought to have a little bit of experienced and knowledgeable people in this as other fields. But I simply do not believe that industry is going to come to it unless there is some way to coordinate these forces.

The direction that we are going in now is the wrong direction.

I simply wonder how we are going to meet it.

Now, my viewpoint is we ought to use this resource that is set aside for this purpose, and if we are not going to use it for this, let's

use it for something else. I haven't found anybody in the industry who would agree with me that any part of it ought to be assigned to some other use. I think maybe someday it might be used. But we are making no progress.

We talk about monopolies because there is only one VHF station in a certain area. It seems to me that follows a concept of depriving the people of service. The mere fact that a large portion of the spectrum remains unused constitutes the greatest monopoly in this business that any program could possibly bring about.

Mr. SANDWICK. We agree with you, Mr. Chairman, 100 percent.

The CHAIRMAN. But you represent a great industry that doesn't seem to be doing too much about it. I may be wrong about it, and I don't want to be unduly critical—but it seems to me that the industry in this country that you represent here has the ingenuity and the capability of coming up with something in this modern scientific age that can solve this.

We developed that this morning. You heard the testimony.

Mr. SANDWICK. I did. I checked with other chief engineers of other companies and have gotten the same answer.

The CHAIRMAN. And you think that the two can be manufactured to where they receive both?

Mr. SANDWICK. No, I didn't say that.

I think they could, ultimately, Chairman Harris. But I want to tell you, I learned some very interesting things when I inquired into it.

The makers of home entertainment products in the electronics field no longer have the extensive research engineering staffs that they had 15 years ago, because many of their most talented engineers and technicians have been reassigned to work in connection with the expanded defense effort since the Korean war.

The CHAIRMAN. Maybe we had better do something, then, to get some of it back.

And if you are required to do it, I think you will do it one way or the other.

Mr. SANDWICK. I am not disagreeing with you for a minute, I am sure it can be solved in a period of time.

But it does seem to us that all of the interested elements have got to be brought into play under the direction and aegis of the Congress.

For any one group to undertake that leadership would get no worthwhile response, in our opinion.

The CHAIRMAN. We have had them since 1953 or 1954. It looks like we are going backward. There are less and less of the UHF sets produced.

Mr. SANDWICK. I can tell you, sir, that every one of them wants to make them if they can only sell them.

The CHAIRMAN. Well, certainly you know that if you have two under the condition we have today, one receiving VHF and the other receiving UHF, they are going to buy the VHF. That is common knowledge. We know the American people are going to do that.

I never had an AM and FM combined radio in my home until a couple of years ago. I don't object to that radio set having a tuner on it that I could get FM, I am glad to have it, and once in awhile I use it. It is very good.

I don't object to it at all.

Mr. SANDWICK. Sir, may I respectfully suggest that if you do want to use it you can get an FM signal, can't you?

The CHAIRMAN. Sure, I can.

But I am talking about the general public. The general public is not going to go out and make an effort to get something where they would have to go to a special effort.

I believe the industry has not, and I don't want to be specially critical, that the industry, not only your industry but the broadcasting industry, too, have not put their shoulders to the wheel and developed this problem. And, as a result, we have been promoting a great monopoly in the field. And in doing so we are letting one of the most valuable resources that we have go to waste.

I hope the industry will continue to give its attention to something and not merely get a committee up somewhere.

I feel that it would make a great contribution to it.

Mr. SPRINGER. May I ask one question?

There was some testimony here by the Chairman of the Federal Communications Commission on Tuesday, you might even have heard it, that here in town there was an advertised—I don't know the circumstances—receiver for the same price to receive both.

Mr. SANDWICK. I don't mean to disagree with the distinguished Chairman of the Federal Communications Commission, but that wasn't quite true. I saw that advertisement, and I have been in the business 33 years at this point, so I checked to find out how it was done. And this is what I found, Congressman Springer:

The same set for VHF only was $10 lower retail. In other words, the set advertised was $189.95. You could buy the same set minus the UHF-equipped feature $10 less. However, the discount to the dealer was considerably shorter on the UHF set than it was on the VHF set, and that equalized the price. In other words, if the dealer was given a discount of 28 percent off the retail price of $179.95 for the VHF set, he got 19 percent on the UHF set. It was a special promotional, and attractive to dealers even on the short discount as a means of inducing traffic into the store at a time when perhaps business was off.

Mr. SPRINGER. Don't you think, though, that that might be an indication of a trend that is on?

Mr. SANDWICK. It might. It was an isolated instance, but I would not say it was symptomatic of a trend at this point, but it might eventually lead to one.

However, the figure that we used in our testimony is the same figure which Mr. Watts of RCA used in his testimony this morning.

At the present time it is a $30 differential.

Now, I didn't get his figure specifically to use the same figure, I checked it with three manufacturers, one in the East, one in the Middle West, and on on the west coast. And what does it cost you to buy a UHF continuous tuner, what circuitry changes do you have to make, and what does it come to, and how do you discount it?

And it comes up to $30 in their view.

It happens that his figure was the same. I had not checked with them.

Mr. SPRINGER. Well, you would know more about it.

I went up for 2 days to the experimental station promoted by the FCC with our appropriations, and, as you know, that studio was the Municipal Studio of the City of New York, down in city hall.

Mr. Siegal, I believe, was the manager. And he had one on top of his present set.

And I said, "How much is that set?"

And he said, "$15."

Mr. SANDWICK. You mean he had a small brown or black box?

Mr. SPRINGER. I would say it was about this wide and about this long [indicating].

Mr. SANDWICK. That would be a converter.

There would be three or four makers of converters, and he was giving you cost on it, sir.

In other words, undoubtedly under their city procurement they were able to buy it at cost rather than retail.

Mr. SPRINGER. That is all, Mr. Chairman.

The CHAIRMAN. How long has it been since your committee passed on this bill and made its determination as to their position?

Mr. SANDWICK. November 30, 1961, Mr. Chairman.

They meet again next week.

The CHAIRMAN. You do meet again in March?

Mr. SANDWICK. Yes, they meet here in Washington on the 15th of March.

The CHAIRMAN. Thank you very much. We are glad to have your statement.

Mr. Gene Posner?

You may proceed.

STATEMENT OF GENE POSNER, PRESIDENT OF WXIX-TV, CHANNEL 18, MILWAUKEE, WIS.

Mr. POSNER. Mr. Chairman, I am pleased to have the opportunity to address this committee on the vital issues that are presented in the proposed legislation before you.

I am the president of WXIX-TV, a Wisconsin corporation, which is the licensee of channel 18 in Milwaukee. Channel 18 is the only UHF independent nonnetwork television station operating against three VHF network stations in the country.

I assume that everyone in this room, and everyone in our country, is interested in the development of a national competitive television system. If this is true, and I believe it to be true, then it must naturally follow that television must be expanded greatly in order to develop a truly competitive system. There is no room for competitive expansion of television under our present system. Except for a few "drop-ins," the VHF band is filled. Mixed markets have not worked out. There is room for real expansion only in the UHF band, but the utilization of this band is meaningless unless and until technical parity is achieved throughout the country.

With this in mind, the Federal Communications Commission has asked the Congress for permission to require manufacturers to produce TV sets capable of receiving all UHF-VHF channels allocated within the present television spectrum. The FCC has proposed, also,

to deintermix eight different markets where presently two UHF stations are operating against a VHF station.

WXIX–TV wholeheartedly and enthusiastically supports these two moves on the part of the Commission as being steps in the right direction. They are not the complete answer but they certainly would go a long way toward building a competitive television system in this country.

In 1959, we purchased channel 18 from CBS, who decided to give up UHF and affiliate with one of the VHF stations in Milwaukee. At that time, CBS claimed that the conversion factor in Milwaukee was about 92 percent, but still not enough to make CBS competitive with the other networks on VHF channels. I must admit that CBS, through its programing and affiliation in prior years, has done a good job in converting the Milwaukee market. What has happened since July of 1959? Although we have tried desperately to stem the tide of the erosion of UHF, we have found that we are losing ground slowly but steadily, so that today, the conversion factor is only 85 percent. This erosion is going on in Milwaukee because of two important factors:

(1) Insidious rumors and gossip implied by our competitors to the effect that channel 18 is going black and doesn't have an audience.

(2) Willful misleading advertising, promotion, and sale of VHF-only sets by large companies, such as Sears, Roebuck & Co., where price is the only factor considered and the public be damned. I have attached to my statement, supporting advertising copy of Sears, Roebuck & Co., exhibit I.

And I have in my hand a copy of this advertising which appeared in the Milwaukee Journal on Sunday, January 28, 1962.

This is a full-page ad by the Sears, Roebuck people. It shows five different television sets, and all of them are identified as VHF. Nowhere in the ad does the word "UHF" appear.

This has been going on for 3 years.

We have talked to Sears, Roebuck about it, but they have ignored us completely. And it is contributing in a great way to the erosion of UHF in Milwaukee.

Without a law, despite all our efforts, organizations like Sears will consistently advertise VHF sets and appeal to the price difference between receivers. Such price selling will inevitably add to UHF destruction.

In connection with programing, I maintain there is enough programing being produced by the three networks to sustain four stations in every metropolitan market. However, none of the networks will clear programing on a UHF independent station. The result is that, in 3 years, we have only carried two so-called network shows. The first was a Green Bay Packer football game on November 13, 1960, and that game was given to us at a high price. We were given only the video portion of it; we had to run our own line to Green Bay and do the audio by monitor from the stadium.

This was so that the people of Milwaukee would have the opportunity of seeing that football game.

The second were the NBA pro basketball games which were telecast during the early part of 1961. NBC made us pay for these

games, but prohibited us from reselling them. The result—we carried them as public service at our own expense.

For some time now, we have been trying to get NBC to feed us 40 minutes of the Jack Paar Show, which is not shown in Milwaukee, and is not carried by the NBC affiliate, WTMJ–TV. This show is a participating show for local sponsors and does not require national sponsors to order the market. We have offered to pay for this show, and we have been told that it is not in the interest of NBC to give us this show. The result is that Milwaukeeans are denied the right to view program material that is available but is not being carried in Milwaukee, I point this out to the committee because it indicates what a lack of technical parity means, not only to the networks, but also to the advertisers.

Although we were the lowest bidder for it, we did not get it because of UHF, which is a dirty word.

These are but a few reasons why it is almost impossible for UHF and VHF to exist in the same market. I say "almost impossible" because the remedies will come from the passage of the all-channel legislation, the deintermixture of mixed markets, and the regulation of the networks to a point where programing material would be rotated among stations, and the networks would be required, in all instances where program material was not cleared by their affiliate, to seek out the independent station and offer the program to it, with or without sponsorship, at a reasonable price.

This is the area in which legislation is absolutely necessary to protect the public interest.

A great deal of hue and cry has been raised by the Commission's proposed rulemaking, looking toward deintermixture of eight markets. Most often heard is the cry that by taking the VHF station out of the market there will be a loss of service in the area. This is not borne out by the facts. Already the New York UHF tests, I have been told, have proven that good UHF pictures are being received at great distances from the transmitter. Recently, in Madison, Wis., one of the UHF stations moved to channel 15, erected a thousand foot tower, and attached a new RCA traveling wave antenna. That station is transmitting as good, or better, a picture into Milwaukee as channel 3, although, theoretically, neither station should reach that far. I have attached to my statement, pictures of channel 15 taken in Milwaukee at the location of our station on March 5, 1962, exhibit II.

I am in favor of deintermixture purely because it tends to increase competition rather than reduce it.

It is difficult for us to find further investment incentives while the ground rules remain as they are. Yes, a thousand-foot tower and possibly more power might improve our signal and reach, but what good is a stronger reach if we still face the gigantic task of trying to convert the new areas to UHF. This is a herculean task and is beyond the power of any one person or station. It would appear to me that the traditional principle of fair play, and the greatest good for the greatest number, would apply here. Competition is still the essence of the American way of life. It has given us the highest standard of living in the world. We are talking about expansion and progress as our national aims and goals. Television is such a vital part of our

national picture that it must be expanded along with the rest of the country.

I submit that the FCC is the only objective, expert and authorized organization in this country to decide on the ways and means of establishing a nationwide competitive television system. Its mandate is clear. It has blueprinted a course of action.

As the most beleagured UHF television station operator in the country, I beg you to give serious thought, and your ultimate support, to the legislation requested by the Commission; and when you do, make sure that you do not defeat the intent of this legislation by tying the hands of the Commission on deintermixture.

Thank you.

The CHAIRMAN. Thank you, Mr. Posner. We are glad to have your statement.

Mr. James Robertson?

You may proceed.

STATEMENT OF JAMES ROBERTSON, VICE PRESIDENT FOR NETWORK AFFAIRS OF THE NATIONAL EDUCATIONAL TELEVISION & RADIO CENTER

Mr. ROBERTSON. Mr. Chairman, my name is James Robertson. I am vice president for network affairs for the National Educational & Radio Network Center.

We appreciate very much the situation in which the committee now finds itself.

I have, during the last few hours of this hearing, Mr. Chairman, been clinging to a conviction. It is that this committee which has had such interest in educational television, particularly in the last year or two, will welcome a change in testimony, and accept now as brief a statement as I can make to you, where there is no consideration of making money, but, rather, the use of VHF and UHF for educational purposes.

Those of us in educational television owe this committee a debt for the efforts that it has already put in in considering the use of the spectrum for education. And I shall attempt to tell my colleagues that the proportion of time which we have taken in these hearings, Mr. Harris, is by no means an indication of the proportionate interest of this committee in the noncommercial use of the frequency, but rather the necessities of the situation.

Rather than reading my statement, may I ask that it be made a part of the record, and that I use my time to underline and expand one or two parts of it for the committee.

The CHAIRMAN. Yes; it may be included in the record.

(The statement referred to is as follows:)

STATEMENT OF THE NATIONAL EDUCATIONAL TELEVISION & RADIO CENTER

My name is James Robertson. I am the vice president for network affairs of the National Educational Television & Radio Center. We appreciate the opportunity of presenting our views to this committee.

The National Educational Television & Radio Center, or NET, as it is more commonly known, is a nonprofit organization which serves as national headquarters for approximately 60 independent noncommercial educational television

stations, furnishing them with a national program service together with other types of services including technical advice.

NET was organized in 1953 to promote the advancement of educational television and radio for the general welfare. It has provided the leadership in the development of the "fourth network" of noncommercial TV stations, the fastest growing television service in the United States. This "fourth network" now includes some 60 stations, one-third of which are UHF and two-thirds VHF.

NET has in the past given assistance and encouragement to the allocation and construction of UHF educational stations and to the improvement of the technical aspects of UHF transmission and reception. We have no small stake in the future development of UHF as these figures demonstrate:

	VHF	UHF	Total
Channels reserved for education	92	184	276
Educational TV stations on the air [1]	44	19	63
Stations on the air compared with the number of reserved channels....percent..	48	10	23

[1] 3 VHF and 5 UHF stations are operating on nonreserved channels.

Two-thirds of the channels reserved for education lie in the UHF band. Thus, the full utilization of UHF and the development of educational television are, for us, inseparable concerns.

As a member of the Joint Council on Educational Broadcasting and its predecessor organization, the Joint Council on Educational Television, NET has consistently encouraged consideration both by the Congress and the FCC of legislation designed to leap a basic obstacle to UHF growth. Educational television interests have long advocated consideration of practical measures to stimulate UHF channel use, such as proposals for the elimination or preferential reduction of Federal excise tax on all-channel receivers and proposals for the prohibition of shipment in interstate commerce of other than UHF-equipped receivers.

In 1956 the Joint Council on Educational Television stated in formal comments presented to the Federal Communications Commission, "while the VHF educational reservations have been and continue to be of major significance in the development of educational television to date, educational television must look to the UHF band for the largest part of its future growth." We believe that the 1956 statement remains pertinent in the context of this 1962 House hearing.

The decline in the prospects of rapid use of UHF frequencies has coincided with a time in which the need for greater educational television coverage has become acute. During the first few years following the FCC's Sixth Report and Order of 1952, the energies and resources of educational associations and institutions concerned with ETV were chiefly concentrated on the establishment of stations in the large cities where VHF channels had been reserved, on dissemination of information concerning the problems and opportunities of educational telecasting, on protecting the reserved channels against efforts to secure them for commercial use, and on development of means for the distribution and interchange of educational programs.

These efforts can best be summarized by the following facts: When KLRN comes on the air within the next month to serve Austin and San Antonio, Tex., every one of the 51 largest urban areas in the country which was allocated a VHF reserved channel will have its own ETV station. But such major communities as Los Angeles, Cleveland, Baltimore, San Diego, Providence, Dayton, and Indianapolis—where widespread ability to see the stations' programs would be a prerequisite to broad community support—as yet have no ETV station because of the barrier of UHF. Nevertheless, this country's ETV stations now are operating in areas populated by more than 70 million people. The capital assets of these stations amount to more than $30 million and their annual operating budgets ran to more than $15 million in 1961. As new stations come on the air, the work toward building State, regional, and national networks has greatly accelerated. Today, with a decade of experience behind us, we stand ready to initiate the next phase of development with great confidence.

Success in launching this second phase depends in large measure upon two crucial elements: the infusion of substantial funds for the construction of new educational television stations, and a significant step forward in the use of UHF channels.

Legislation providing for Federal financial assistance for the construction of educational television facilities is no stranger to this committee. S. 205 was passed by the Senate in the last session. Indeed, this measure has been passed on three different occasions by the Senate. H.R. 132, which likewise provides funds for ETV construction, just last week received the blessing of the House Rules Committee. At this moment nothing is so important to the growth of educational television as the passage of this legislation in the 87th Congress.

But the provision of funds for the construction of new ETV stations will not in and of itself, release the full potential of the channels reserved for education if the new UHF stations remain severely limited in audience potential due to technical restrictions built into the receiver sets.

In a substantial number of communities where UHF educational television stations are operating, the emphasis is upon programing of a direct instructional type, designed primarily for classroom use. Schools can be equipped with all-channel receivers so that inschool telecasting can be effectively conducted. But ETV stations strive to achieve a balanced program schedule, one which is responsive not only to the direct instructional requirements of its audience, but also to community needs for programs on local public issues, informal adult education in the arts, humanities, sciences, public affairs, and out-of-school children's programs. Operating a UHF educational station today normally means good service to schools, but citizens of the community are not likely to make the special additional investment necessary to convert their VHF-only sets to receive this educational and cultural program service. Until they ee it and use it, they cannot be expected to support it financially. Sometimes they are even unaware of its potential benefits to them.

Emphasis upon the terms "educational channels" and "educational stations" has often led to a misinterpretation of the programing role of these noncommercial station. Quite apart from their immense value as facilities for direct instructional courses, they are likewise an invaluable source of programs such as the following:

"Prospects of Mankind": A monthly analysis of vital issues presented by Mrs. Eleanor Roosevelt with guests such as Secretary Rusk, Governor Rockefeller and leaders of other countries.

"Intertel": The result of a four-nation program production agreement, which has thus far resulted in hour-long programs filmed in South Vietnam, France, England, and British Guiana.

"Heritage": A series featuring the life and work of such people as Robert Frost, Richard Rodgers, Louis Armstrong, and Branch Rickey.

"The Citizen and the New Age of Science": An 11-part series using study-discussion techniques to develop an appreciation of science among nonscientists.

"What's New": A 5-day-a-week of half hour children's programs, carefully researched and imaginatively produced in which the child learns about himself and the exciting world around him.

These NET series and many others like them, together with locally produced programs serving local needs, are quite as important as the more "academic" noncommercial TV service. They are designed for a wide home audience, the audience which too often cannot receive the programs because of the technical limiations of VHF-only receiver sets.

Given this concept of the problem, it is not hard to understand why half of the VHF channels reserved for education are now activated, yet only 10 percent of the UHF channels have been activated. Realizing that two-thirds of the channels reserved for education are UHF, one can begin to understand one of the fundamental reasons why there are not now more ETV stations in operation.

Accordingly, NET strongly supports legislation which will require that TV receivers for public use, shipped in interstate commerce or imported into the United States, provide all-channel reception. We do feel, however, that Federal authority in prescribing minimum reception capabilities for TV receivers should be limited to the all-channel set objective.

Finally, Mr. Chairman, let us place this matter in its most serious and significant perspective with a series of assumptions which we believe to be both valid and realistic.

Let us assume that education is the most important aspect of a nation's life; let us assume that television has proven to be one of the most effective vehicles for transmitting knowledge in the modern world; let us finally assume that the manufacture of all-channel TV receivers will greatly assist in unlocking

a vast public resource for the enlightenment of all citizens through the development of a national educational television service.

Our conclusion is that all-channel TV sets are not a luxury. Their availability in every corner of our land is essential to the full utilization of television to the point where it affords every American a wider choice of service. Not only in terms of entertainment but most assuredly in terms of the lifelong education so necessary in a democracy, these unused channels must be brought to life. They are perhaps our most important natural resource.

The CHAIRMAN. Of course, you know that we have given a great deal of time to the educational television problems. Only this week the House passed a bill on it. The record is full of a lot of this information.

Mr. ROBERTSON. That is precisely what I was attempting to refer to, sir. And we understand, also, the necessity of no hearings last Wednesday afternoon, and we appreciate greatly the efforts that you and others have put in in our behalf.

Let me direct your attention to the figures at the bottom of page 1 of my statement. You will note that of the 276 channels reserved for education, two-thirds are UHF, almost all of them in markets that are saturated with VHF-only receivers.

You will note on the statement that of the 63 TV stations on the air, two-thirds are on VHF.

And on the third line of the table we find the most significant fact, that 48 percent, or nearly half of the reserved VHF channels, are in operation, but only 10 percent of the reserved U's.

We believe that the answer is very simple. The TV stations for the most part have gone on the air in communities where the television audience can tune them in on present receivers.

Over on page 3, line 5, you will find an elaboration of this.

When KLRN comes on the air within the next month to serve Austin and San Antonio, Tex., every one of the 51 largest urban areas in this country which was allocated a VHF reserved channel will have its own ETV station. But such major communities as Los Angeles, Cleveland, Baltimore, San Diego, Providence, Dayton, and Indianapolis—where widespread ability to see the stations' programs would be a prerequisite to broad community support—as yet have no ETV station because of the barrier of UHF. Nevertheless, this country's ETV stations now are operating in areas populated by more than 70 million people. The capital assets of these stations amount to more than $30 million and their annual operating budgets ran to more than $15 million in 1961.

I should like to add for the benefit of this committee that a recent survey by Dr. Wilbur Schramm, of the Institute for Communications Research at Stanford University shows that at least 12½ million man-hours a week are spent by American men, women, and children now watching programs on ETV stations. This is home viewing only. This doesn't include additional viewing in school classrooms or on college campuses.

Now, in terms of the purposes of your legislation, these statistics set me to wondering what the situation might have been by now if all of those 276 reserved educational channels could be tuned in on all existing sets.

It seems reasonable to assume we might have by now activated 48 percent of all 276 channels instead of 48 percent of the V's, in which

case we would today have 132 noncommercial educational stations instead of 63, and the number of man-hours spent watching educational television, educational and cultural and noncommercial programs, might well be not 12½ but 25 million.

I don't think it is necessary to explain why local leaders are reluctant to activate an ETV station on a reserved channel which television station owners can't receive on their sets. Actually it is not impossible to operate such a station, the 19 UHF stations that are on the air are primarily engaged in direct service to schools, to classrooms. And here the all-channel receiver can be established in the classroom, and the support of the station comes from the schools, but this is only half of a two-part responsibility that these stations undertake and it is our understanding that the Commission has anticipated that these stations would take, that in addition to their very important service to normal instruction that they also provide an alternate program service to people in homes.

And I think the committee is well aware of the program service of National Educational Television, and of the great variety of programs in an adult education and out of school programing for children which are in evidence all across the country.

You have, of course, an excellent example of the fact that it is difficult to provide the financial wherewithal to operate such a station. There is a UHF station right here in Washington, WETA on channel 26, which has now been on the air almost 6 months. And despite their best efforts, they have, in addition to the problem of attracting viewers to its programs and finding its proper means of financial support, staggering tasks of persuading set owners to go out and find a converter and doctor up his incomplete receiver. This is why many communities interested in ETV have not activated UHF channels.

But there is an even more compelling reason for our urging this legislation, Mr. Chairman, and supporting it. It is the rapidly growing conviction in American education that television indeed may well enable us to keep up with an increasingly complex world not only in the classroom and on the campus, but in the continuing lifelong education of our American citizenry.

Let me cite for you—and, again, I think it is information which presented in this way may be of use to the committee, or I would not take your time with it—the first fact is, of course, that the number of educational television stations on the air has doubled in the last 3 years, even without the incentive of the legislation which the House passed on Wednesday, or the all-channel sets net anticipates 100 affiliates by 1965. With these incentives this will grow much more rapidly.

The second fact is the growing number of communities interested in getting a station of this sort on the air.

Two years ago we had been contacted by 31 such communities. today the comparable number is 68.

The third fact is the increasing use of television in our schools.

I quote from portions of the 1961 survey of instructional television by McBride & Meyerhenry under the U.S. Office of Education grant:

In terms of total live programing by 53 at that time educational television stations—

and this is programing to the schools, now—

back in 1957 and 1958 there were 256 actual courses presented live on ETV stations. By 1960–61 this had gone up to 569. In terms of school systems, public school systems using television for instructional purposes, among public school systems with 12,000 or more students enrolled, out of 162 school systems reporting—

this was in 1960—

68 percent of them were using television for instructional purposes. The smaller school systems as a general rule are not using it quite so extensively. But the other side of that coin is that the larger school systems are serving a larger number of students. And these statistics come out to the fact that approximately one-third of the students in the United States today in elementary schools are using television and do represent potential receivers of television instruction if it were made available in one or more subjects at every grade level.

Mr. SPRINGER. I don't want to interrupt you. All of these facts we have. What I would like to ask you simply is this: Are you in favor of the all-channel receiver?

Mr. ROBERTSON. Yes.

Mr. SPRINGER. Are you against the deintermixture, or for it? Or do you take a position on it?

Mr. ROBERTSON. We have in the past, in certain specific instances, taken the position that deintermixture in those special circumstances was advisable.

Mr. SPRINGER. Selected deintermixture; is that right?

Mr. ROBERTSON. As a general rule; however, Congressman, particularly in view of all-channel receiver legislation and the possibility that this would go through, we cannot support the deintermixture pattern.

Mr. SPRINGER. If your all-channel receiver legislation goes through by itself, is that right, is that your position?

Mr. ROBERTSON. That is right. Moreover, we cannot see deintermixture as by any means anything more than an interim stopgap solution to a few communities.

Mr. SPRINGER. Then your position on that is substantially that of the FCC?

Mr. ROBERTSON. That is right. That is the closest we could get. I shall not take the further time of the committee, Mr. Chairman. I appreciate you allowing me to give these remarks, and to represent the 60 stations and the many schools and colleges that would have liked to have been heard at this hearing.

Thank you for your courtesy.

Mr. SPRINGER. I thank you, too.

The reason I know all of this—at the University of Illinois, Harold Hill, the secretary, comes from my hometown, and I have been over there and up and down at least 17 times that I know of since this thing has come up, so I do know the story. But I was trying to find out what your position was, and it is important to know what the official position of your group is.

Mr. ROBERTSON. Let there be no mistake about our total and complete support of the all-channel legislation. Despite the fact that in the past in certain instances we have supported deintermixture, believing that it would equalize competition and perhaps in some of its ramifications afford additional channels for education. This is merely a stopgap, and cannot be looked upon as any kind of a long-term gain.

The CHAIRMAN. Thank you, Mr. Robertson.
Mr. Arthur Ingram?

STATEMENT OF ARTHUR INGRAM, GENERAL MANAGER, WICU-TV, ERIE, PA.

Mr. INGRAM. Mr. Chairman and members of the committee, my name is Arthur M. Ingram. I am general manager of television station WICU operating on channel 12 in Erie, Pa. I appear before you this evening on behalf of WICU television.

I am aware of and concerned about the Chairman's remarks pertinent to the amount of repetitive information heard by the committee. I will ask at this point, since there is repetitive information in my statement, and I am one of the last group to testify, if I may have this statement with its attachments entered into the record, and present what I think may be something new or throw some light on the VHF's and the effect of deintermixture.

I do not recall from the testimony I have heard that anyone has talked about the extent of the wide area coverage of the VHF and how it brings back to the community from which it originates certain economic and social benefits. To that end, if I may, I would like to read this letter, and I will conclude here. This letter was written to me on March 5 from the Greater Erie Chamber of Commerce, and it says:

DEAR MR. INGRAM: At the board of directors meeting of the Retail, Wholesale, and Service Division of the Greater Erie Chamber of Commerce, on March 1, 1962, the subject of the Federal Communications Commission's proposal to convert WICU, channel 12, to a UHF channel was discussed at length. The board made a motion they would be against a change, at this time, for the following reasons:

1. Due to our central location from larger cities, if the VHF channel 12 is removed at this time, there are many towns and communities in the tristate area that would be virtually without TV coverage.
2. The merchants of the Erie area depend on this extended coverage for sales promotion. It is felt a decline in overall sales would certainly follow.
3. If channel 12 is discontinued, this change would make it necessary for many people to convert their present TV set to receive a UHF signal. In some cases, this is impractical and would necessitate the purchase of a new TV set, causing undue hardships.
4. The change and lack of coverage in the tristate area could affect our vacation and tourist business which is so vital to our overall economy.

For these reasons the board feels it is in the best interest of the merchants and Erie that channel 12 remain at this time so that you can continue broadcasting without lessening overall coverage and effect.

Just one more remark that I would like to make: We want to definitely establish that we are opposed to selective deintermixture or wide area deintermixture, and certainly support the policies outlined in the Roberts bill, H.R. 9267.

Mr. Chairman and members of the committee, I thank you for this opportunity. I have tried to make my statement very brief.

The CHAIRMAN. Mr. Ingram, thank you very much for your statement. You have made a very brief statement, but we certainly do get the position that you have taken here. In looking over your statement I can very well understand some of the problems that you are faced with.

Mr. INGRAM. Thank you very much, Mr. Chairman.

The CHAIRMAN. You are one of the markets under consideration for deintermixture?

Mr. INGRAM. Yes; we are.

Mr. SPRINGER. So you are undoubtedly not for the deintermixture?

Mr. INGRAM. No, sir; we are not.

Mr. SPRINGER. But you do support all-channel receiver legislation?

Mr. INGRAM. Yes, sir.

Mr. SPRINGER. Thank you.

The CHAIRMAN. Thank you very much, Mr. Ingram.

Mr. INGRAM. Thank you very much.

(The statement of Arthur M. Ingram follows:)

STATEMENT OF ARTHUR M. INGRAM, GENERAL MANAGER, WICU–TV, CHANNEL 12, ERIE, PA.

Mr. Chairman and members of the committee, my name is Arthur M. Ingram. I am general manager of television station WICU operating on channel 12 in Erie, Pa. I appear before you today on behalf of WICU–television.

The problem of deintermixture is related to the bills before this committee. Because I am familiar, as a broadcaster, with the Erie market, I should like to speak for several moments about deintermixture as I believe it would affect this market. I am, of course, aware that deintermixture as now proposed, affects seven other market areas.

The deintermixture proposal is not new so far as Erie and channel 12 are concerned. In June 1957, at the request of certain petitioners—the Commission issued a notice of proposed rulemaking propsoing to deintermix Erie. After extensive rulemaking proceedings, which involved multiparty presentations, the FCC, in 1958, decisively rejected deintermixture for Erie.

The Commission's conclusions were summarized in the following terms: "* * * Some 'white area' would result from the deletion of channel 12 from Erie. Erie is not predominately a UHF community. Much of the areas within the computed grade B service area of the Erie station is served with multiple VHF signals from Buffalo, Cleveland, and Pittsburgh stations. Although UHF set conversion is moderately high in and immediately adjacent to the city of Erie, there is considerably less UHF conversion outside the Erie metropolitan area. Except for a narrow strip of coastal land along Lake Erie, the terrain within the grade B contours of the Erie stations is rough and hilly and not well suited to UHF propagation. The deletion of channel 12 from Erie would probably deprive a number of isolated communities of their best, or of their only, dependable television service * * *."

Upon reconsideration, the Commission affirmed its earlier order and the bases for its original rejection of deintermixture for Erie were unchanged. Commissioner Ford concurred, saying in part:

"I concur in the result reached in this order. At the present time the Commission is vigorously studying the UHF–VHF problem and seeking a solution to it. It is my belief that until an overall policy is developed toward which our actions can be directed it is a mistake to consider the problem in a piecemeal fashion."

I have included these quoted excerpts from FCC decisions to show that deintermixture of the Erie market has been considered and rejected for good and sufficient reasons.

As recently as February 1960, or about 17 months before the current deintermixture proposals, the Federal Communications Committee reported to the Senate Committee on Commerce as follows:

"In the course of the Commission's deliberations to date, we have reached substantial agreement on two general conclusions as follows:

"The Commission is likewise convinced that 'deintermixture,' the assignment of VHF only facilities to some communities, and UHF only to others, cannot provide a long-term answer to the allocations dilemma. Deintermixture, limited to selected communities, cannot provide the needed stimulus for future UHF expansion. Area deintermixture, on the other hand, would involve large-scale disruption to the public and introduce inequities and inefficiency in the distribution of stations facilities among the separate communities and States."

Thus we have a firm statement from the Federal Communications Commission that deintermixture will not work.

We now come specifically to docket No. 14242 calling for comments on a rule-making proposal toward deleting channel 12 and substituting channel 54.

Included in the comments which we have filed is the following information:

At present WICU–TV provides service to all or substantial parts of eight northwestern Pennsylvania counties; Ashtabula County in Ohio; and, Chautauqua County in New York.

The current deintermixture proposals regarding Erie, Pa., changing VHF channel 12 to UHF channel 54, would shrink WICU–TV's service to this market area drastically.

Shifting WICU–TV to UHF channel 54 would reduce WICU's service to this area by over 50 percent causing a loss of local service to 263,000 people.

This decrease in coverage would create a white area (no television service) amounting to 897 square miles and deprive 57,570 persons of their only television service, 36,410 persons of their second and only local service, 107,220 of their third and only local television service, and 61,970 persons of their fourth and only local television service.

These losses in absolute service, local service, choice of service, VHF and network service are neither consistent with congressional mandate nor with FCC rules governing fair, efficient, and equitable distribution of services to the public.

Attached to this statement are copies of two letters written to the Commission in objection to the deletion of channel 12 in Erie. I will not take the committee's time to read these in entirety. However, a paragraph of each, I trust is in order:

No. 1: "In view of the fact that deintermixture would eliminate direct service to many residents of Pennsylvania, I am stating my most serious objection to the removal of the VHF channel from Erie at this time—and until such time as the Commission has fully attested the possibilities of a countrywide UHF system" (from a letter written by Gov. David Lawrence).

No. 2: "As we well know, the effect of the charge from VHF to UHF would be to reduce the present coverage to Erie County itself. Our educational television program, "Television Enriches Learning," is being received on all weekdays in school systems as far away as Warren and Meadville. This program is bringing educational experiences in all the basic subjects to our elementary schools. We feel that the success of this program in creating learning situation for our youngsters will be lost to many of the viewers, especially in the fringe areas, if we are confined to UHF coverage (from a letter written by Joseph Zipper, superintendent of schools).

The committee for competitive televison has been most articulate in urging that UHF cannot compete with VHF. In some cases they are correct. The basic reason for this competitive inequity is the lack of receivers capable of receiving all channels.

If I may attempt an analogy:

There are, at this time 3,622 AM radio stations broadcasting in the United States. In market after market, from coast to coast, you will find radio stations competing with power differentials ranging from 250 to 50,000 watts. The reason for this is elemental. Audiences select programs and can tune in whatever they want, depending upon their tastes.

No one, to my knowledge, has seriously gone before the Commission or anyone else with the plea that a 250-watt station cannot compete with a 5,000-watt station and that therefore all stations should have 250 watts.

Yet, in a sense, this is ultimately the comparable result in television of the long range all UHF plan were to become effective. Instead of having VHF and UHF develop competitively side by side—we would be flooded with a multitude of relatively short-range UHF stations.

Logically, the answer appears to lie in all-channel set legislation—but certainly not with the huge loss of service to the public inherent in the elimination of the wide-ranging VHF's.

We do not question the Commission's high and admirable motives in developing educational television plus a greater range and diversity of services to the public. It is the method which we question and with which we disagree.

Now the Commission has placed the basic policy question of intermixture, as opposed to deintermixture and all-UHF, squarely in the hands of the Congress in connection with the all-channel receiver legislation .It is our belief that such legislation, if passed, should provide for basic TV–VHF service. The bill intro-

duced by Mr. Kenneth Roberts, of Alabama, H.R. 9267, expresses a policy which we believe to be consistent with public interest in that UHF and VHF stations can operate side-by-side in the same communities. Further, the publics VHF and UHF service where now received would be retained without damage. The Robert's bill would insure the growth of both educational and commercial television in a manner making full use of 12 VHF channels and 70 UHF channels.

In conclusion, WICU–TV, channel 12, Erie, Pa., adds its voice to many others, in respectfully urging the passage of a bill providing for all-channel set legislation and precluding the elimination of VHF either by selective deintermixture or other means.

THE SCHOOL DISTRICT OF THE CITY OF ERIE, PA.,
January 4, 1962.

In re docket No. 14242

Mr. BEN WAPLE,
Secretary, Federal Communications Commission,
Washington, D.C.

DEAR MR. WAPLE: The proposal of your Commission to delete VHF channel 12 of WICU, Erie, Pa., and to substitute UHF channel 54 has bothered us in the school district of the city of Erie to the extent that we wish to ask you to reconsider in light of the fact that education in the counties surrounding Erie County might be seriously affected.

As we all know, the effect of the change from VHF to UHF would be to reduce the present coverage to Erie County itself. Our educational television program, "Television Enriches Learning," is being received on all weekdays in school systems as far away as Warren and Meadville. This program is bringing educational experiences in all the basic subjects to our elementary schools. We feel that the success of this program in creating learning situations for our youngsters will be lost to many of the viewers, especially in the fringe areas, if we are confined to UHF coverage.

Beside our educational perspective there are also coordinations in the areas of political, economic, and social affairs with Crawford, Mercer, Venango, and Warren Counties that are definitely strengthened by our television station WICU. We believe that this community feeling generated in all of northwestern Pennsylvania sehould not be relegated to a secondary position in television when it is of such importance in maintaining leadership in the entire State of Pennsylvania.

We hope that your Federal Communications Commission will review the proposal as stated in docket No. 14242 with a view to maintaining the broader perspective of community life that can be improved with a VHF station.

Sincerely yours,

JOSEPH H. ZIPPER,
Superintendent of Schools.

COMMONWEALTH OF PENNSYLVANIA,
GOVERNOR'S OFFICE,
Harrisburg, Pa., November 15, 1961.

Hon. NEWTON N. MINOW,
Chairman, Federal Communications Commission,
Washington, D.C.

DEAR MR. MINOW: I am writing to you and to the other members of the Federal Communications Commission to urge that the only VHF channel, channel 12, of Erie, be preserved for this city and for the very important area which it serves for the following reasons:

1. This is the only VHF channel within 100 miles of Erie, the closest being assigned to Buffalo, Cleveland, and Pittsburgh.

2. Deletion of channel 12 would deny the only grade B service to: (1) all of Crawford County; (2) at least 75 percent of Warren County; (3) over 50 percent of Venango County; (4) about 30 percentof Mercer County.

3. The terrain to the south and east of Erie is highly unfavorable for the propagation of UHF signals.

The detailed engineering reasons for maintaining channel 12 at Erie were placed before the Commission in 1957 and are part of docket No. 12076. The Commission ruled against deintermixture at that time and the facts leading to this decision have not changed as of this date.

In view of the fact that deintermixture would eliminate direct service to many residents of Pennsylvania, I am stating my most serious objection to the removal of the VHF channel from Erie at this time and until such time as the Commission has fully attested the possibilities of a countrywide UHF system.

Very truly yours,

——— ———.

The CHAIRMAN. Mr. David L. Steel, Sr.?

STATEMENT OF DAVID L. STEEL, SR., BROADCAST AND COMMUNICATIONS CONSULTING ENGINEER, WASHINGTON, D.C.

Mr. STEEL. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Steel, you may include your entire statement in the record—we have been giving permission to others to do that—and proceed to summarize it as you desire.

Mr. STEEL. Thank you.

(The statement referred to is as follows:)

TESTIMONY OF DAVID L. STEEL, SR.

My name is David L. Steel, Sr. I am a broadcast and communications consulting engineer with offices at 3312 M Street, NW., Washington, D.C. This testimony is submitted on behalf of Plains Television Corp., licensee of UHF stations WICS, Springfield, Ill., WCHU, Champaign, Ill., and WICD, Danville, Ill.; and on behalf of Winnebago Television Corp., licensee of UHF television station WTVO, Rockford, Ill.; and on behalf of Forward Television, Inc., licensee of UHF television station WMTV, Madison, Wis.

I have been actively engaged in communications and/or radio and television broadcast engineering since 1940. Between 1940 and 1945 I was on active duty in the U.S. Navy aboard various submarines as a radio man. I received an honorable discharge in 1945 as a chief radioman. For the next 27 months I attended Capitol Radio Engineering Institute (CREI) to further my education in radio and television broadcast engineering. Following graduation from CREI in May of 1947, until 1950, I was employed by the radio consulting firm of Chambers & Garrison. From 1950 until 1953 I was employed as a senior radio engineer by the successor firm of Millard M. Garrison. From 1953 until 1956 I was an associate partner in the engineering firm of Page, Creutz, Garrison & Waldschmitt and from 1956 until 1961 I was a senior partner in the engineering firm of Page, Creutz, Steel & Waldschmitt. Since July of 1961 I have maintained my own practice, doing business as David Steel & Associates. I am a member of the Institute of Radio Engineers, the District of Columbia Society of Professional Engineers and of the National Society of Professional Engineers. Since 1947 I have held a first-class radio telephone operator license from the Federal Communications Commission. I have been a registered professional engineer in the District of Columbia since 1952. My qualifications as an expert engineering witness on matters pertaining to radio and television communications have been accepted on previous occasions by the Federal Communications Commission, other Government agencies and by various Federal and circuit courts and local zoning boards.

Over the past 15 years my principal activity as a consulting communications and broadcast engineer has been engineering work mainly related to broadcasting, such as feasibility and allocation studies, radio and television systems design, preparation of broadcast technical facility specifications, inspection of facilities during construction and manufacture, adjustment and proof of preformance measurements on technical facilities prior to program operation and licensing and as an engineering adviser to broadcast management in engineering operations and facility improvements in accordance with the latest state of the art.

At the present time, my firm represents 9 existing UHF television stations and 15 VHF television stations. Since 1948 I have made numerous field intensity and coverage surveys to determine the service and coverage provided by these facilities and their local competitors. UHF facilities operating with antenna heights comparable to present VHF facilities of 1,000 to 1,500 feet and with sufficient power, 200 to 1,000 kilowatts, can provide excellent broadcast cover-

age to substantially the same area as maximum power VHF facilities in areas of flat and rolling terrain as characterized by the average conditions prevailing in the Midwest. Until quite recently there have been very few UHF facilities that have enjoyed the advantages of having technical facilities of sufficient height and power to provide coverage to as large an area as most of the VHF maximum power and height stations that are presently operating. As a matter of fact, most of the present UHF facilities in this country are still operating with inferior facilities in comparison with average VHF facilities, that is to say, substantially lower antenna heights and with effective radiated powers considerably below the allowable power authorized by the Federal Communications Commission rules and regulations. Most of the UHF stations that I represent went on the air shortly after this band of frequencies was authorized by the Federal Communications Commission in 1953 with the equipment that was then available for this portion of the frequency spectrum. We have since found out that many of these original installations commenced operation and operated for a number of years with transmitters that were too low in power to serve their expected service area, considering the inadequacies of the UHF receiver and receiving antenna systems that were first placed on the market and with deficient transmission lines and antenna systems. Needless to say, most installations used the best equipment that was available at the time, and it has only become apparent in the last 2 or 3 years that much of this equipment was actually not performing up to technical expectations even from the transmission end. As an example, as recently as the last few months, both WMTV in Madison, Wis., and WTVO in Rockford, Ill., have installed new antennas and either new or completely reworked transmission line systems that have resulted in an increase in signal intensity substantially in excess of that to be expected, considering that new antennas of the same relative gain were installed as were originally installed in 1953. Obviously, the only explanation for such superior improvements as have been noticed in these areas in the last few months can only be attributed to deficiencies in the original transmission systems and to substantial technical advances in the design of the new transmission systems that have just recently been placed in service. Field intensity measurements made by the Association of Maximum Service Telecasters (AMST) submitted to the Federal Communications Commission as part of the Allocation Study Organization (TASO) report during 1959 and 1960 showed that UHF operation in Madison, Wis., was substantially inferior to the channel 3 VHF facility operating in the same market. These measurements in Madison and in several other markets of the United States submitted to the Commission in the TASO report indicated that the average UHF television station provided good television service out of a field intensity of 1,000 microvolts per meter or 60 dbu, having a "critical distance" of 40 miles. Based upon the limited sample taken by TASO there was also some indication that the UHF signal was attenuated below the theoretical propagation curves, by some 22 db. As this committee, and a number of Members of Congress are aware, these two isolated facts have been publicized to no small extent by various segments of the television industry. My experience would indicate, particularly for the area of Illinois and southern Wisconsin, that there are no real engineering grounds for these conclusions in this part of the United States. These conclusions by TASO were represented by measurements taken on UHF television stations having antenna heights and powers substantially below the maximum authorized by the Federal Communications Commission, namely, an average antenna height of 740 feet and a power of 365 kilowatts, as against 2,000 feet and 5,000 kilowatts authorized under Federal Communications Commission rules. In comparison, the VHF measurements were made on stations having an average power of 99 kilowatts for low-band VHF (maximum authorized, 100 kilowatts) and 265 kilowatts for high-band VHF (maximum authorized, 316 kilowatts). This deviation of the average station sampled by TASO as compared against the authorized height and power as provided by the Federal Communications Commission rules and regulations was, however, noted in a footnote. TASO summarized the findings of their varios committees by concluding that the results of the TASO committee leads to the values of critical distance in coverage considering all engineering receiver and transmitting propagation factors as given in the following table. TASO describes the "critical distance" as being "that distance beyond which consistently good television service, on the average, was found to fall off rather rapidly with *currently used* effective radiated powers and transmitting antenna heights." [Emphasis supplied.]

Frequency range	Channels	Critical distance (miles)
Low VHF	2-6	65
High VHF	7-13	55
Low UHF	14-40	40
Medium and high UHF	41-83	30

Low-band VHF coverage to 65 miles was reported to have a field intensity of 45 dbu.; high-band VHF, 55 dbu.; and low band UHF, 60 dbu.

Field intensity measurements recently submitted by Television Wisconsin, Inc., to the Federal Communications Commission in docket 14,239, show that the recently completed channel 15 installation of WMTV in Madison, Wis., produces a measured median field intensity of 60 dbu. at an average of 59 miles. This measured propagation of channel 15 in Madison is actually better than would be predicted by use of the FCC curves by some 9 miles, so it is quite apparent that any use of a —22 db. attenuation factor for UHF below the FCC theoretical curves would be grossly in error in this part of the United States, provided, of course, the measurements were being taken on true kilowatts and not on some sick or defective antenna system. My own field intensity measuring truck has just, in the last few days, returned from Madison and our analysis of the independent measurements that we have made in this area on the present operation of WMTV is in very close agreement with the measured data submitted to the Federal Communications Commission by the licensee of WISC–TV. WMTV has only been operating with an antenna height of 1,160 feet and on channel 15 since October 25, 1961, which compares quite favorably with the height of channel 3 in this market, of 1,200 feet. WMTV previously operated on channel 33 with an antenna height of 690 feet and 158 kilowatts. This improvement in the WMTV facility is only the first of several construction steps planned by the licensee in order to equalize the station's coverage with that of the existing VHF local station. In addition to the substantial improvement that the increase in tower height and the new antenna has made in the coverage of the WMTV UHF facility, there is continuing improvement in the UHF receiver and receiving antenna performance.

I have here, for your inspection, a series of 10 photographs showing a comparison of the picture quality that we observed within the new WMTV service area versus the measured field strength. Photograph No. 1 in the upper left hand corner shows a signal of slightly above FCC grade A. Photograph No. 4 shows a picture just below FCC grade B. These pictures were taken using a Channel Master antenna having a retail value of $25, located 30 feet above ground and a stock 1961 RCA portable 19-inch receiver. The voltage measurements were made also at 30 feet at the same locations, using a Nems Clarke UHF field intensity meter. Photographs 5 through 10 show the deterioration of the picture at the measured values, below the value recognized by the FCC as constituting grade B quality. Our experience with present day 1961/1962 available equipment indicates that a very good picture relatively free from snow, can be obtained down to a voltage level of approximately 54 dbu, or 10 db below the present FCC criteria of grade B. You will note that from this series of pictures, photographs 9 and 10, which are below 50 dbu, are noticeably noisy (snowy).

Photograph No. 9 was taken in Richland Center, a small community of some 1,200 homes in Richland County, 48 miles northwest of Madison. Of the 1,200 homes in the community, 1,050 homes are connected to the Richland cable system, which has been in operation since 1955. The Richland cable system carries all three Madison commercial stations, channel 3, channel 15 and channel 27. The cost to the consumer is $15 for installation, plus a service charge of $3.25 a month. Our observations in the community of Richland Center indicate that there was about the same amount of trouble getting a satisfactory signal on channel 3 as there was on channel 15 and 27. This is substantiated by the high number of homes in the community that subscribe to the cable system.

The bills you are presently considering look toward legislation requiring the manufacturer of all-channel receivers, as well as the advisability of deintermixing certain selected markets in the United States to make such markets either all UHF or all VHF.

On behalf of the previously mentioned broadcast licensees I have made detailed engineering studies on the effects of deintermixture in the communities of Champaign and Rockford, Ill. and Madison, Wis., along with other com-

munities. These studies have been filed with the Federal Communications Commission in their appropriate dockets. The results of these studies can be summarized briefly as follows:

Champaign, Ill.: Rulemaking looking toward converting WCIA, channel 3, 100 kilowatts, 940 feet, AAT, operation to UHF. WCIA presently provides grade B interference-free coverage to an area of 8,790 square miles, containing a population of 650,575. Within this area, 1,734 square miles containing a population of 58,943 receive their only present interference-free television service from WCIA. Either channel 21 or 27 are available for assignment to WCIA in order to provide grade B or better service to all of the present grade B interference-free service area of WCIA. Such a facility would require an effective radiated power of 1,000 kilowatts and an effective tower height of 1,100 feet, or the equivalent.

(Note: FCC maximum for this area is 5,000 kilowatts and 2,000 feet).

If the present channel 3 operation of WCIA is converted to UHF the following stations would receive less interference within their grade B contours and have an increase in interference-free service as follows:

Station	Population	Area (square mile)
WAVE	16,410	153
WSIL-TV	27,680	469
KYTV	1,825	114
KTVO	82,804	1,016
Total	128,719	1,742

WISC–TV in Madison also operates on channel 3 and if not converted to UHF would receive less interference within the grade B contour if WCIA were to vacate channel 3, within an area of 453 square miles containing a population of 192,793. This area includes the area in and around Rockford, Ill. If WCIA is converted to UHF, other stations would receive less interference and thus would enjoy enlarged interference-free service areas providing 1,898 people in an area of 119 square miles with a first television service, 15,858 people in 101 square miles would gain a second service, 303,408 people in 1,949 square miles would gain a third television service, and 348 people in an area of 36 square miles would gain a fourth service.

Rockford, Ill.: Rulemaking loking toward converting WREX–TV, channel 13, 229 kilowatts, 710 feet, AAT, operation to UHF. WREX–TV presently provides interference-free grade B coverage to an area of 7,301 square miles, containing a population of 754,696. Within this area 727 square miles containing a population of 24,168 receive their only present interference-free television service from WREX–TV. Channel 17 is available for assignment to Rockford that could be used by WREX–TV. A channel 17 facility in Rockford operating with a power of 525 kilowatts and an antenna height of 1,000 feet would provide grade B or better service to all of the area that presently receives interference-free grade B service from the present facilities of WREX–TV. Converting WREX–TV to UHF would result in less interference being caused on channel 13 to the following stations, thus resulting in an increase in service as follows:

Station	Population	Area (square miles)
WEAU-TV	2,124	102
WLW-I	4,733	110
KRCG	7,939	313
WHO-TV	6,872	219
Total	21,668	744

If WREX–TV is converted to UHF, other stations could receive less interference and would thus enjoy enlarged interference-free service areas, providing 2,727 people in 56 square miles with a first televsion service, 2,129 people in 62 square miles with a second television service, 12,077 people in 430 square miles with a third television service, 8,286 people in 253 square

miles with a fourth service, 2,972 people in 42 square miles with a fifth service and 187 people in 16 square miles with a sixth service.

Madison, Wis.: Rulemaking looking toward converting WISC–TV channel 3, 56.2 kilowatts, 1,200 feet AAT operation to UHF. WISC–TV persently provides grade B interference-free coverage to an area of 8,382 square miles containing a population of 611,589. Within this area 351 square miles containing a population of 6,281 receive their only present interference-free television service from WISC–TV. Operating on channel 33, which is available in Madison for use by WISC–TV, an effective radiated power of 600 kilowatts would be required to provide grade B or better service to all of the present area which presently receives grade B interference-free service from WISC–TV. This assumes that WISC–TV would employ their present tower for use in UHF at the present height of 1,200 feet above average terrain. If the present channel 3 operation of WISC–TV is converted to UHF the following stations will receive less interference within their grade B contours and have an increase in interference-free service as follows:

Station	Population	Area (square miles)
KDAL–TV	13,680	1,390
KGLO–TV	13,567	625
WKZO–TV	17,291	219
Total	44,538	2,234

WCIA in Champaign also operates on channel 3 and if not converted to UHF would receive less interference within the grade B contour if WISC–TV were to vacate channel 3 within an area of 156 square miles containing a population of 5,581.

If WISC–TV is converted to UHF other stations would receive less interference and would thus enjoy enlarged interference-free service areas, providing 12,085 people in 1,046 square miles with a first television service, 18,583 people in 516 square miles with a second television service, 15,481 people in 656 square miles with a third television service, and 3,329 people in 172 square miles with a fourth service.

SUMMARY

Each one of the above VHF stations provide the only VHF commercial broadcast service in their respective communities. In my opinion, if these three facilities were converted to UHF with equivalent technical facilities as I have outlined, the public would be served. There would be opportunity for the establishment of equal competitive television facilities, there would not be any loss in television service to areas or populations presently receiving such service, and such deintermixture would encourage and foster the growth and development of existing competitive facilities in each of the markets and possibly in other communities. Each of the markets is situated and surrounded by terrain very favorable for UHF propagation. Sufficient time has elapsed since establishment of commercial UHF television stations in 1953 so that more advanced and effective technical equipment is available for affecting wide area television coverage utilizing the UHF band and sufficient channels are available so that no scarcity exists in establishing numerous equal competitive technical facilities. This cannot be done with the limited channels available in the VHF bands alone. Nor, in my opinion, is there any need to delay the establishment of equal competitive television facilities in these three markets since everything that is necessary to accomplish a fair, efficient utilization of the television spectrum to serve these communities and surrounding areas is presently available. Technically, we are ready now.

Deintermixture in these markets of Champaign, Rockford, and Madison can be accomplished today, considering the advances that have been made in the art, without resulting in any loss in commercial television service to existing viewers. Such deintermixture would correct the present local unbalance and result in equal commercial competitive facilities since it would encourage the present UHF licensees to proceed to improve their technical facilities rapidly.

The present VHF facilities in each of the three markets could and probably should be retained in each community for educational television. By retaining

the VHF in these communities for educational television, a major contribution could be achieved without any sacrifice on the part of commercial interests. It is my understanding that the Wisconsin State Board of Regents has requested the Commission to consider the use of channel 3 for education in Madison. The channel 13 facility in Rockford could be reserved for educational use (I know of no immediate request by educators for the channel at this time). Channel 3 in Champaign could be substituted for the present educational channel of WILL–TV and the present channel 12 facilities of that station might well be used as an educational station by Purdue University in Lafayette. Educational television has been slow to get started in this country, compared with commercial television. Selective deintermixture as outlined would encourage this development as would the bill to require an all-band television receiver, without depriving the communities or areas of their existing VHF facilities.

Mr. STEEL. This is the first time I have appeared before you, although I feel pretty much at home after seeing you so much on television.

I don't desire to read this whole statement in the record. It is a little different from what I heard this afternoon. I prepared it last night on returning from a court case in Florida, and it is a statement of my own prepared on behalf of a number of my UHF clients in Illinois and Wisconsin.

Was it your suggestion that I skip reading the complete statement into the record?

The CHAIRMAN. I think what we are interested in more now, Mr. Steel—of course, we would like to have the supporting data and all—is to find out what your position is in order that we may know for the record. That is the important thing for the committee to know.

Mr. STEEL. I have here a series of 10 photographs that were taken on the new channel 15 operation of WMTV in Madison, Wis., that commenced operation with their present tower antenna system on October 25, approximately 3 months ago, or 4 months ago.

This picture relates as best the camera could portray the quality of the television picture versus the field strength at the location in microvolts per meter and also in d.b.u.'s.

I know there is also some confusion about how many d.b.u.'s a present-day receiver on UHF actually gives the viewer. TASO has a quality point index type of writing, one, two, three, four, five, and this is hard also for people to understand. And I think this picture might help clarify what is obtainable today.

The first four pictures here show the signal that was received with a signal level in excess of grade B.

All of the pictures, the six pictures in the lower part are progressively weaker in signal strength.

As shown by the TASO (Television Allocation Study Organization), UHF, low-band UHF can provide a good signal out to the 60 d.b.u. contour. This is the 1,000-microvolt contour. This is some 4 d.b. below what the FCC calls grade B for UHF.

Now, all of these pictures on down, the last five pictures, are taken at progressively weaker than the 60 d.b.u.

Mr. THOMSON. Might I ask a question, Mr. Chairman?

The CHAIRMAN. Mr. Thompson.

Mr. THOMSON. Where was picture No. 9 taken?

Mr. STEEL. Picture No. 9 was taken along the river bottom at Richland Center. This shows a signal intensity of 285 microvolts, 49 d.b.u. And, as you can see, the picture is quite snowy.

Mr. THOMSON. Was that on a cable?

Mr. STEEL. No, sir, this was made with an antenna at 30 feet above my measuring truck. This was not on the cable.

Mr. THOMSON. And it wasn't a very good picture, either, was it?

Mr. STEEL. No, sir, it is not.

Mr. THOMSON. I am particularly interested, because that is the city in which I live.

Mr. STEEL. Yes, I am aware of that, Mr. Thomson.

Mr. THOMSON. And you represent that WMTV gives a good picture out there?

Mr. STEEL. I don't want to represent that. I don't mean to say that in my statement. The cable system, as you are probably aware, has about 1,050 subscribers out of 1,200 homes. Our measurements within the town showed that there were very few locations where you could obtain a good television picture off the air. However, all three of the Madison stations are carried on a cable system, both channel 3 and the two UHF commercial stations, channels 15 and 27.

Mr. THOMSON. I have some other questions, but I can delay them until Mr. Steel is through.

Mr. STEEL. I will try to shorten this as much as I can, Mr. Chairman. I will start down at the bottom of the page.

At the present time, my firm represents 9 existing UHF television stations and 15 VHF television stations. Since 1948 I have made numerous field intensity and coverage surveys to determine the service and coverage provided by these facilities and their local competitors. UHF facilities operating with antenna heights comparable to present VHF facilities of 1,000 to 1,500 feet and with sufficient power, 200 to 1,000 kilowatts, can provide excellent broadcast coverage to substantially the same area as maximum power VHF facilities in areas of flat and rolling terrain as characterized by the average conditions prevailing in the Midwest. Until quite recently there have been very few UHF facilities that have enjoyed the advantages of having technical facilities of sufficient height and power to provide coverage to as large an area as most of the VHF maximum power and height stations that are presently operating.

Mr. SPRINGER. Might I interrupt there?

I see what you are saying. Is that true of Plains Television Corp. on page 9 that you are testifying for, and is that also true—you represent Plains television station, don't you?

Mr. STEEL. Yes.

Mr. SPRINGER. And is that true, the paragraph you just stated, is that true of Plains Television?

Mr. STEEL. Yes, they are at much lower height and power than the station in Champaign, Ill.

Mr. SPRINGER. Now, to make them competitive, what they should do is to raise the power and height of the tower?

Mr. STEEL. Yes, they should.

Mr. SPRINGER. In essence, what I understood you to say was that providing that you had the right tower height and the power, that they could offer almost the area of maximum VHF, is that right?

Mr. STEEL. Yes, in this portion of the United States.

Mr. SPRINGER. In this portion of the United States?

Mr. STEEL. That is my opinion.

Mr. SPRINGER. They are able to do it in approximately the same area of coverage?

Mr. STEEL. Yes, sir.

Mr. SPRINGER. I will have to say one thing, you are the frankest, most honest engineer I have ever seen testifying before the committee, because you are the first one that has so said it. And that is exactly what the engineering up there shows in the experiment station on top of the Empire State Building.

Mr. STEEL. Mr. Springer, on behalf of the WMTV Madison VHF competitor, they have filed recently with the Federal Communications Commission a field intensity survey on both channel 3 and on channel 15 which shows essentially this same thing.

Now, channel 15 is still operating at 200 kilowatts of power, but they are and have been for the last 3 or 4 months at about the same antenna height, some 40 feet lower, at the channel 3 antenna. When this station commenced operation with this high tower facility, they, for the first time, got out of this 40-mile range that you have heard so much about. Many of the statements you have been hearing about for 40-mile limitation of UHF coverage are made upon the average station sample by TASO. Some years ago they equalized all these and averaged them all over the country.

Mr. SPRINGER. You take a 1,200-foot tower plus a million watts and you are going out there pretty close to 60 miles, aren't you?

Mr. STEEL. The measurements that WIHC–TV submitted to the Commission in response to inquiry as to the present deintermixture program in Madison showed exactly that, that the average distance to the channel 15 contour was 59 miles on the eight radials measurements.

My survey truck just returned from there last week, and we are analyzing the data.

Now, most of the radials are completed. Our analysis was made of the points that were measured at odd-mile differences out, taking measurements in accordance with the TASO recommendations, taking measurements at 30 feet every 2 miles from our site, whereas WISC's engineer took measurements every 2 miles from his site both on his station and on channel 15. So that you have a sample now of approximately every mile. And these two sets of measurements made by his engineer and by my engineer are almost in exact agreement, showing that this station is delivering with their new antenna, with a good transmission line, and with a competitively high tower, a good UHF 1,000-microvolt 60-d.b.u. signal at 59 miles.

This is why I wanted to show you a 60-d.b.u. signal which TASO said is a good picture—and I will agree with them—but if you have more than the average sample UHF station that was sampled in 1958 and 1959, you are going to put out this signal much further than 40 miles, where you have good flat terrain or rolling terrain which is very favorable to UHF, like in Madison, and Springfield, Champaign, Rockford, South Bend——

Mr. SPRINGER. You have been making this test down in the Springfield area then?

Mr. STEEL. No, I have not made field intensity surveys in Springfield or Champaign.

Mr. SPRINGER. Now, on page 9 you have some conclusions with reference to WCIA. I am sure they must have been engineeringly based.

Mr. STEEL. These conclusions are the conclusions of the comments I prepared and submitted to the Federal Communications Commission a week or two ago, based upon using the FCC propagation curves for this area, which would show the limitation to the grade B contour.

Now, these areas, Champaign, Springfield, Rockford, are no different in terrain, they are quite comparable to what we have in Madison, Wis., South Bend; Youngstown, Ohio, and with good antennas and with sufficient tower heights, I find WISC–TV has found that the UHF signal, given these favorable conditions, will propagate even in excess of the present curves used by the FCC.

Now, I must admit, this is quite different from reported by TASO or at least as concluded by TASO where they summarize using average conditions and make the power and height differential noted in the footnote.

Mr. SPRINGER. All I say is that your conclusions here bear out the conclusions which I think we are going to come to in that experimental station.

Mr. STEEL. Yes; I think you will.

Mr. SPRINGER. So UHF is competitive with VHF?

Mr. STEEL. I think it can be made on the technical basis today, given the proper conditions such as proper tower heights, at least competitive tower heights, and competitive power, and proper operation all the way through.

Mr. SPRINGER. Thank you, Mr. Chairman.

Mr. THOMSON. I had one more question, then.

If that is all true, why do you recommend deintermixture? If it is competitive right now, doesn't that destroy your argument to deintermix that area?

Mr. STEEL. We are talking about selective deintermixture in a new market where we know UHF can do the job, and where the UHF stations have been operating now for a period of 8 or 9 years with very unfavorable economic disadvantages with Madison Avenue—let's face it, most of these UHF stations have been losing substantial amounts of money over long periods of time. They need relief, they need immediate relief in many areas. This is the basis why I would go along on my own recommendations. The way I feel, these areas in Illinois and Madison should be deintermixed——

Mr. SPRINGER. Your economics are good, and it ought to be good if they can get reception. It looks to me like what you need is an all-channel receiver, not a deintermixture. You have got the same coverage, provided they put in the same amount of money and power as the V did, and a lot of people say the U picture will be better than the V picture, at least there is some indication that that might be true. And if they are competitive, then the only thing you need is an all-channel receiver.

Mr. STEEL. That would be true, except that I don't want to misrepresent, because in order to get this signal it is harder today, it does cost a little more money, it costs more for every set, as the people have been testifying here.

Sure, you can go out and buy a converter wholesale for $15, but the average consumer pays $30 for it. This is a real disadvantage.

If you are going to buy a second television set like many people are doing today, if you can save $30 you will buy a VHF only.

Mr. SPRINGER. If you have the all-channel receiver only, and you jack the power up—I am talking about on Plains Television, and on Metropolitan in Decatur, and in Danville—and you put the power up to what you are talking about, the whole thing is all equalized, if you got an all-channel receiver, there certainly is no advantage.

Mr. STEEL. I don't want to get into the economic aspects of this, because I don't know about it, I don't know Madison Avenue.

Mr. SPRINGER. We have had a lot of evidence today on economics, and I won't pursue it any further.

But you are the best argument I have for continuing it as it is. You are a good witness.

The CHAIRMAN. Any further questions?

Mr. THOMSON. No.

The CHAIRMAN. Thank you very much. We are very glad to have your statement.

Mr. STEEL. I do want to make one observation here.

It was called to my attention that on page 14 of my testimony I state:

> It is my understanding that the Wisconsin State Board of Regents has requested the Commission to consider the use of channel 3 for education in Madison.

This understanding was arrived at by reading the February 3 edition of the newspaper Wisconsin State Journal in Madison, and also the February 2 edition of the newspaper, the Milwaukee Journal, where this is reported.

Now, admittedly this is hearsay on my part. I don't know this to be the fact. If it isn't the fact, I apologize for putting it in there. This is where I obtained my information.

The CHAIRMAN. You are not the first one that has been quoting the newspaper.

Mr. STEEL. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much.

Mr. John W. English?

STATEMENT OF JOHN W. ENGLISH, SECRETARY, DIRECTOR, AND STOCKHOLDER OF GREAT LAKES TELEVISION CO.

Mr. ENGLISH. Mr. Chairman, I must express at the outset an admiration for your endurance, and I will not try to impose upon it. I will not read this entire statement.

I would like to have your permission to enter it in the record.

The CHAIRMAN. You may include your statement in the record, Mr. English.

(The statement of John W. English follows:)

STATEMENT OF JOHN W. ENGLISH, SECRETARY AND DIRECTOR OF GREAT LAKES TELEVISION CO.

My name is John W. English, secretary, director, and a stockholder of Great Lakes Television Co., which operates channel 35, a UHF station with the call letters WSEE in Erie, Pa. I am authorized to appear before you on behalf of that station. I am also the president of Sir Walter Television Co. which operated WNAO–TV, a late lamented UHF station which operated on channel 28 in Raleigh-Durham, N.C.

In Erie we are approximately 100 miles from both Buffalo and Cleveland, and 135 miles from Pittsburgh. In all of these markets there are three VHF network stations. Our nearest market is Youngstown, Ohio, 80 miles to the southwest, which never had a VHF assignment and therefore enjoys four UHF stations.

We in Erie have on the air one VHF, channel 12, with the call letters WICU, which gives ABC service to Erie, and one UHF station, WSEE, channel 35, which gives primary CBS service to Erie and a limited NBC service. Surveys indicate that approximately 85 percent of the people of Erie County have converted to UHF and, generally speaking, only all-channel receivers are sold in this market. In Erie itself and in Erie County, there is no measurable penetration of viewer service from any outside city. In every other county served by the Erie stations there is a substantial measurable audience from several outside stations.

Erie therefore becomes, from the television standpoint, a substantial market in itself, far enough from any other market to require full local service but at the same time with fringe area limited by the surrounding signals of large markets. All of these market factors are fully covered in the comments which we filed with the Federal Communications Commission in the current proceedings and which we ask the permission of the chairman to make a part of this record.

There are certain simple facts we believe it is necessary to reiterate. The experience of UHF makes it clear that it is technically not an inferior service. The people of Erie can receive, and do receive, pictures on normal television sets that are just as good on either channel. It is basically all television and there is less difference in signal characteristics between UHF and VHF than there is in AM radio between 500 on the dial and 1500 on the dial.

Any flyer who uses air-to-ground communications equipment can manipulate VHF or UHF with equal facility and satisfaction.

Erie is, however, a good market to illustrate the problem of why UHF has had difficulty in the past and continues to require vigorous and intelligent development now and in the future.

In Erie, WICU–TV went on air March 15, 1949. The grant was received shortly before allocations were frozen throughout the country. The market was therefore developed as a VHF market and had no sets capable of receiving UHF when allocations were again opened allowing two additional commercial UHF channels and one educational UHF channel. We at WSEE are a group of local citizens who began operation on April 25, 1954. Starting with no sets, we submit that we have done a good job in creating an 85 percent all-channel market.

However, the national picture makes clear a pattern. The national time buyer will too often purchase time on the basis of taking the V, when he has a choice, rather than the U—not because of any inherent advantage and regardless of relative price or local market conditions.

The VHF operator is given credit for every set technically capable of receiving its signal. Thus, WICU in Erie claims 197,200 homes; WSEE, a UHF station, claims 108,000 homes. Actually, the viewers of both Erie stations are served in fringe areas by other market signals.

There can be no legitimate complaint with regard to the Erie market for loss of rural coverage, since every area in the fringe has outside coverage. Moreover, we proposed, when deintermixture was previously considered for the Erie market, to increase our power to make it in every way comparable to VHF coverage. When we did not receive encouragement, we of course could not financially complete the proposal. We have now applied for a satellite station in Oil City, and two translators in Titusville and Franklin, Pa. All of these are on UHF. Due to the valley situations of these communities, they can only get an outside signal on either VHF or UHF from antenna systems, a matter of continuous cost. These new installations will, for the first time, make available good local free television for the people.

Gentlemen, these are natural developments which can only come about if our operation and that of additional UHF stations is not continuously hampered by an artificial Government-created competitive disadvantage.

The local advertiser and the local viewer is not aware of this disadvantage. To him, it is all television; and local acceptance and local sales are good. The local buyer knows what he likes. He does not start out with the foolish concept of an "inferior service." It is the national and regional situation which is often cockeyed.

Our figures will bear all of this out, and I strongly recommend that this committee should examine the figures, on file with the Commission, of the operating revenues and costs of the various stations, both UHF and VHF, in these affected intermixed markets.

I believe an examination of the Erie situation will disclose a UHF station with revenues in the neighborhood of one-sixth of those of the VHF competitor—UHF annual losses of $50,000 and up, as compared with VHF profits before taxes of perhaps $600,000 annually. The fact that we have survived at all is due to rigid economy, a small but devoted staff, a most understanding union, and stockholders who have suffered too long.

The impact of the national picture can be realized by the experience of our related station in Raleigh-Durham, NC., where we were the first station on the air. Conversion was 100 percent, ratings were good, and by every standard of normal commonsense, we should have had no problem. There also, once the VFH got on the air, we had a continual slide in business and, finally, went off the air, after suffering losses of some $700,000.

Why will deintermixture change this? Simply because the national buyer wants Erie and he will buy it, and buy it on a competitive basis on UHF without hesitation or demur. You all have copies of the "Dallas Smythe Report on Peoria and Central Illinois." Peoria is a market comparable to Erie, in which each of the three stations, all UHF, attained approximately equal gross billings at a level of $800,000 annually, for a total gross business in the market of approximately $2,400,000. At this level of business, all of these stations should enjoy comfortable prosperity.

Most importantly, and this is the real concern of the Commission and I am sure of you gentlemen, the public itself receives the full benefit of all three network programs. We hear much of loss of service to fringe communities, but it does not seem to occur to most of you that in all of these communities there are UHF television allocations which will be used if UHF grows in neighboring communities. In Erie, examples of such communities are: Dunkirk and Jamestown, N.Y.; Ashtabula, Ohio; and Bradford, Warren, Oil City, Titusville, Meadville, and Franklin, Pa. I have seen comments which speak of VHF allocations to communities as being precious. Actually, to the people they have often been a curse since they have inhibited full service. They are precious only to their licensees. Look at Youngstown, Ohio—our nearest neighboring market which has enjoyed service from four local stations, and the people are not aware or interested that they have never had VHF.

Is Youngstown worse off than Erie where the people now can enjoy only two signals? You have heard the comments of Hon. Carroll D. Kearns of Mercer County, who has pled for the retention of channel 12 in Erie on, among other grounds, that many people in Mercer would be deprived of service if channel 12 were changed to a UHF channel.

He was evidently unaware that the signals from Youngstown covered 97 percent of Mercer County homes and were on UHF. So little do people think of any differences between UHF and VHF under these circumstances that I am sure he was unaware of the difference in his own home. Moreover, it is significant that, according to the latest Nielson survey, station WICU is rated 10th out of the 11 stations viewed in Mercer County.

Erie has perhaps another unique distinction. The UHF station, because CBS has always considered Erie an ideal UHF market, has had excellent programing from that network from its inception. More recently, NBC has been kind enough to give us, exclusively, the facilities of their network. For this we are of course deeply grateful to both networks. Our programing is therefore equal to, or better than, the best stations in larger markets. We have 75 percent of the nationally rated top shows. The VHF station, at very high rates, has only ABC. In spite of this, we are at a competitive disadvantage, as our figures show.

We have viewed with interest a campaign recently released in which the VHF station has tried to stir up a storm of public feeling. This follows, I believe, a national pattern on the part of these affected stations. In our area, it has been greeted with success only where actual misrepresentation has been used. The licensee of channel 12 has given the impression that that station is being driven out of town—off the air. It has indicated that it will go off the air rather than go UHF. This is not, I am sure, in any respect true. People are often deceived and did really think that they would have less local programing rather than more. Only recently have they begun to realize that this is not so. I have here for the consideration of the committee a representative group of petitions and letters

which prove these matters, and if it is the desire of the committee, I will file for the record such letters and tapes of broadcasts of station WICU and its affiliate radio station WICU which establishes these matters.

In view of these facts and with deep conviction that the future of competitive local television can only lie in the further and continuous development of UHF, we respectfully suggest to this committee that a vigorous program of deintermixture be continued. That deintermixture in the specific markets now being studied by the Commission should be left up to that courageous and expert body. That all-channel set legislation should be pushed through with every expedition. The issue, gentlemen, is far larger than the individual interests of the licensees of the various stations in these eight markets. It goes to the very root of what will be developed as television in the United States.

If you wish local, good, competitive television, it is unquestionable that this must be developed in the 70 bands of ultrahigh frequency. As you know, the Commission by its rules allows UHF stations to go to far greater power than VHF stations. They will certainly do so, if they are given even modest encouragement. In addition, you all know that ultimately larger and larger portions of the spectrum space must be made available for purposes other than commercial television. If you are going to continuously foster air safety through instantaneous air-to-ground communications and a continuously increased program of space satellite development, you must have more space, and due to the characteristics of the television signals the only logical place to obtain this additional spectrum space is in the VHF television band.

With regard to Erie, let me repeat that this area under discussion will receive just as adequate service from UHF as from VHF, with the further advantage of encouraging and making possible more service to the community.

I deeply appreciate the courtesy and kindness of this committee in permitting us this opportunity to be heard.

Mr. ENGLISH. I believe that there are certain things, however, in this that the Erie market illustrates, some points that are of some importance to this committee in considering the legislation before it.

My name, as I have indicated, is John English. I am the secretary, director, and a stockholder of Great Lakes Television Co. which operates channel 35, a UHF station with the call letters WSEE in Erie, Pa. I am authorized to appear before you on behalf of that station. I am also the president of Sir Walter Television Co. which operated WNAO–TV, a late lamented UHF station which operated on channel 28 in Raleigh-Durham, N.C.

In Erie we are approximately 100 miles from both Buffalo and Cleveland, and 135 miles from Pittsburgh. In all of these markets there are three VHF network stations. Our nearest market is in the Youngstown, Ohio, area 80 miles to the southwest, which never had a VHF assignment and, therefore, enjoys four UHF stations.

We in Erie have on the air one VHF, channel 12 with the call letters WICU which gives ABC service to Erie, and one UHF station, WSEE channel 35 which gives primary CBS service to Erie and a limited NBC service. Surveys indicate that approximately 85 percent of the people of Erie County have converted to UHF and, generally speaking, only all-channel receivers are sold in this market. In Erie itself and in Erie County, there is no measurable penetration of viewer service from any outside city, so we have the only two stations as far as Erie is concerned.

We started from nothing a few years ago from the viewpoint of conversion, and we have approximately an 85-percent conversion at the present time.

There are certain simple facts that we believe it is necessary to reiterate.

And, Mr. Chairman, the statement of the witness who just preceded me, I think, will bear out what I am about to say.

The experience of the UHF makes it clear that it is technically not inferior service. I will point out here that we operated on 185 kilowatts, 1,500 feet above sea level, and roughly a thousand feet above the city of Erie. So that we qualify from the viewpoint of giving a pretty good signal.

The people of Erie can receive and do receive pictures on normal television sets that are just as good on either channel. It is basically all television. And there is less difference in signal characteristics between UHF and VHF—and this, incidentally, is true—than there is in an AM radio between 500 on the dial and 1500 on the dial.

In other words, a low-band AM radio has actually a greater difference compared to a high-band AM radio than there is between UHF and VHF television.

We are, however, a good market to illustrate the basic problem.

WICU went on the air on March 15, 1949, and then the allocations were frozen, and the market, of course, developed as an entirely VHF market. We went on the air in 1954, starting with no sets, and I think we have done a good job in getting an 85-percent conversion.

But the real problem is this: The national picture makes clear a pattern. The national time buyer will too often purchase time on the basis of taking the V, whenever he has a choice, rather than the U, not because of any inherent advantage, and regardless of relative price or local market conditions. The VHF operator is given credit for every set technically capable of receiving its signal. The UHF operator, however, is strictly looked at with suspicion, and his set count is examined with a fine toothed comb.

So that WICU claims 197,200 sets, we claim 108,000.

There can be no legitimate complaint in the Erie market for loss of rural coverage, since every area in the fringe has outside coverage.

Moreover, we proposed to go to a megawatt when this was considered before, and we dropped it, because when we received no encouragement, it was a great problem financially to do so.

I will leave most of the rest of this statement to the record.

I would like, however, to call your attention to one thing that is not on the record, bearing on one thing that the chairman and all of you, I know, have felt a very serious concern about. In Erie there is no problem of rural coverage, no problem of people missing a signal. Actually, due to the three signals in Cleveland, the three signals in Buffalo, the three signals in Pittsburgh and the four signals in Youngstown, and the two signals in Erie, the only orphan not having at least four signals is Erie itself. And Erie is the third market of Pennsylvania, and deserves, competitively at least, full network coverage.

Thus, for instance, in Mercer County, Congressman Kearns, for example, testified—and there has been the testimony of my respected representative of the other station—that some signal coverage might be lost in Mercer County.

There are 11 signals, and the dominant stations are the 4 UHF stations from Youngstown. Actually WICU is received in Mercer County, but it only has a count of seven, which is an infinitesimal number of viewers.

I am citing these facts from the NBC or Nielsen survey for 1961, which is the authority accepted throughout the industry.

The basic problem in Erie is Erie and Erie County. And in Erie and Erie County, due to the distance from every other area, UHF can

do just as good a job was VHF in every respect. And under these circumstances, we feel that there can be no problem of rural coverage, there can be no problem of any sort which would block the question of deintermixture.

I want only to repeat this thought, Mr. Chairman. And this goes along with the question that was asked of the previous witness, the peculiarity of this business is this, that with a station fundamentally competitive, with the two major networks, CBS and NBC, with actually better programing because we have two networks, more than most major city stations, we still are in a situation where our gross revenue, primarily due to the national time buyer, is approximately one-sixth of that of the V. We lose approximately $50,000 a year. The V makes approximately $600,000 a year before taxes. And most importantly—and this is your real concern, I think—is that the people of Erie, due to the economics of the matter, not due to a question of coverage, or serve, but due to the economics of the matter, cannot get a third signal, a third station, so long as Erie is in an intermixed situation.

I thank you very much for your courtesy, Mr. Chairman, and I will certainly be happy to answer any questions.

The CHAIRMAN. Thank you very much, Mr. English.

Any questions?

Mr. SPRINGER. Before deintermixture, how are you on all-channel receivers?

Mr. ENGLISH. Very much for all-channel receivers and for deintermixture.

The CHAIRMAN. Don't you think if you had available receiving sets that would help that situation?

Mr. ENGLISH. Let me put it this way, Mr. Chairman. If we survived another 10 years; yes. But it would take another 10 years to do it. Actually, due to the fact that we have an 85 percent conversion now, and it is going up all the time, the all-channel receiver thing would only do one thing for us, it would merely give to the knotheads in Madison Avenue, if I may put it that way, the knotheads in Madison Avenue the misty conclusion that UHF is going to survive, and it would perhaps make it a little easier to sell there. And that would be a benefit. And some day it would be an even greater benefit, we could go to higher power, and actually—I would like to mention one more thing, and that is that as you are aware, the Commission confines low channel V's to a hundred kilowatts, high channel V's to 316 kilowatts, and UHF operators can go up to 5 megawatts, 5,000 kilowatts.

Now, actually no one has yet done it. But, frankly, technically, when a UHF operator goes up to 5,000 kilowatts from the viewpoint of coverage you will either be able to see it hell and gone or you will be able to fry eggs on it. It will do a tremendous job.

Actually, at 1 megawatt you could see not a good picture but a very fair one, of WBUF in Buffalo in my house with a mere indoor antenna 90 miles away. And I couldn't see either one of the V's under the same circumstances.

The CHAIRMAN. Thank you very much, sir.

Mr. John C. Lynn, the legislative director of the American Farm Bureau Federation?

(No response.)

The CHAIRMAN. Mr. Lynn may file his statement for the record if he wishes.

The CHAIRMAN. Mr. Angus McDonald?

The CLERK. He wanted to put his statement in the record.

The CHAIRMAN. Mr. McDonald may put his statement in the record.

(The statement of Angus McDonald follows:)

STATEMENT OF ANGUS MCDONALD, ASSISTANT DIRECTOR, DIVISION OF LEGISLATIVE SERVICES OF THE NATIONAL FARMERS UNION

Mr. Chairman and members of the committee, I am appearing here in support of H.R. 9267, a bill which would place certain limitations on the authority of the Federal Communications Commission to delete certain very high frequency TV channels and in opposition to H.R. 8031 which would amend the Communications Act of 1934, apparently in order to give the Commission authority to order a shift from very high frequencies to ultrahigh frequencies.

According to our information ultrahigh frequencies have a shorter geographic range than very high frequencies. Consequently, if the Commission's announced intention to shift from very high frequencies to ultrahigh frequencies is carried out, those relatively distant from the point of transmission will be deprived of TV service. Since those as a rule, who are distant from the point of transmission are those living in rural areas, it is obvious that farmers will be adversely affected.

We have been in touch with members of the Illinois Farmers Union in regard to this issue and they have urged us to indicate to the Federal Communications Commission and any congressional committees considering legislation concerning this issue that they are positively opposed to a shift from very high frequencies to ultrahigh frequencies.

It would appear that the Commission could still continue to authorize a television broadcast on the lower range and at the same time authorize broadcast on the higher range in the same area. This, of course, would require certain mechanical changes, but in any event such changes would have to be made in TV receivers, if ultrahigh frequency is used, either singly or in conjunction with very high frequencies.

We respectfully ask the committee to consider these views and also ask that the attached communication to the Federal Communications Commission pertaining to this issue be inserted in the record.

NATIONAL FARMERS UNION,
Washington, February 6, 1962.

Re comments, docket No. 14229.

Mr. BEN F. WAPLE,
Acting Secretary, Federal Communications Commission,
Washington, D.C.

DEAR MR. WAPLE: The members of the Federal Communications Commission are aware of the great value of television to the farm families of the Nation as a medium providing those living in rural and outlying areas with information of specific interest to farmers in addition to the news, weather, and current events. Farm families also benefit from educational, rural, and religious programs.

We are therefore concerned to learn that the Federal Communications Commission plans to deintermix large areas throughout the United States. According to our information deintermixture would require existing stations to stop operating on very high frequency channels (2 to 13) and to shift to ultrahigh frequency channels (14 to 83). Included in the immediate plans of the Commission, according to our information, are a number of communities in areas where Farmers Union has substantial membership. Among these are Madison, Wis.; Rockford and Champaign, Ill.

The inevitable result of this shift from VHF to UHF would be to deprive thousands of our members of television service, since UHF has a range of only 30 to 40 miles and VHF has a range of 55 to 65 miles. Furthermore, service in UHF areas would generally deteriorate.

The cost of building and operating even a medium powered station is beyond the means of the public in smalltown, rural, and farm areas. There would be no way economically to replace the service in outlying areas which farmers would be deprived of. We see no reason why the two groups of frequencies cannot exist side by side. Certainly the proposal to deprive farmers of television service is premature. Congress has appropriated $2 million for studies of the technical service in New York City. These studies are expected to yield information which might provide a clue as to how farmers may continue to enjoy television service, even though certain shifts in frequencies were necessary.

We are at a loss to understand why the FCC has initiated this radical change in policy. In February 1960, the FCC reported to the Senate Commerce Committee that the agency had reached substantial agreement on the following points:

"* * * The Commission is likewise convinced that deintermixture—the assignment of VHF-only facilities to some communities, and UHF-only to others—cannot provide a long-term answer to the allocations dilemma. Deintermixture limited to selected committees cannot provide the needed stimulus for future UHF expansion. Area deintermixture, on the other hand, would involve large disruption to the public and introduce inequities and inefficiency in the distribution of station facilities among the separate communities and States." (Hearings before the Senate Committee on Interstate and Foreign Commerce, television inquiry, 86th Cong., 2d sess., pp. 4585–86, 1960.)

Officials and members of the National Farmers Union will appreciate any consideration given to this communication. Although we do not pretend to be experts and realize that the Commission has certain duties and obligations to the Congress and to the American people, we feel strongly that every other alternative should be explored before any action is taken by the Commission which would deprive farmers of the service.

Respectfully,

JAMES G. PATTON, *President.*

The CHAIRMAN. Mr. Jack Jackson?

STATEMENT OF JACK JACKSON, REPRESENTING THE NATIONAL GRANGE

Mr. JACKSON. Mr. Chairman, I have a statement that I would like to file for the record, and I would like to summarize it in less than 1 minute, if I may.

The CHAIRMAN. Mr. Jackson, you may include your statement in the record.

(The statement of Jack Jackson follows:)

STATEMENT OF JACK JACKSON ON BEHALF OF THE NATIONAL GRANGE

My name is Jack Jackson; I represent the National Grange.

I am not a radio engineer; I do not represent myself—or my organization—as one whose concern with the implications of proposed legislation under consideration is based upon an expert engineering knowledge of all the many technical factors involved in, or at least related to, action proposed. However, we do have a firsthand knowledge of the TV needs of rural people and we have made a careful study of other circumstances, proposals and developments which we believe to be inseparable from the desirable aims of this legislation.

I want to state at this time that the National Grange strongly supports properly drafted all-channel receiver legislation. This is not a reversal of any previous position of the Grange; it is a restatement of the position reported at hearings before the Senate Subcommittee on Communications, February 22, 1962—a restatement which I feel necessary in light of an unfortunate interpretation of our Senate testimony.

Our studies of bills under consideration here today, leave us with a firm conviction that, if passed in its present form, H.R. 8031 would definitely encourage deterioration of TV service to many thousands of rural citizens.

On the other hand, we firmly believe that legislation such as H.R. 9267 (the Roberts bill) and companion bills would insure the continuation of consistently good, wide-area television service such as that presently serving millions of

people in rural, farm, and outlying areas of our Nation. At the same time, it would aid further expansion of television service in these and other areas.

H.R. 8031 makes no direct reference to action primarily responsible for our concern. As already pointed out, we likewise concede that—because we are not engineers ourselves—our recommendations are, to an extent, based upon other than firsthand knowledge of technical factors involved. For these reasons, I will appreciate the committee's indulgence in a brief outline of the structure and purpose of the Grange and of the policymaking procedure through which our recommendations were developed. An understanding of these factors is essential to a full appreciation of the basis for our concern and recommendations.

Grange membership is approximately 750,000; these members are disbursed among some 7,000 local subordinate granges located almost exclusively in rural areas. Many of our 750,000 members live 50, 75, or even 100 miles—or more—from a major center of population.

A primary purpose of the Grange is to foster a better way of life for rural people and for all Americans. Thus, while we seek effective TV service for all, we are especially interested in any legislation affecting TV or any other service to citizens living outside urban areas.

Grange policy is a product of membership. Local granges meet on the average of twice a month. Over 600 meetings are held each weekday night. At these meetings, members discuss issues and decide how they will use their organization to serve themselves and their country. They prepare and approve resloutions making their decisions known to their State and National Grange.

Resolutions relating to problems of intrastate nature are resolved at the subordinate or the State grange level. Those involving problems of greater magnitude are referred to the National Grange.

Three hundred and twenty-seven such resolutions, all have originated in the rural atmosphere of subordinate granges, were submitted to our 95th annual session last November.

Each of these 327 resolutions was referred to 1 of 12 subject-matter committees for study, deliberation and recommendation—much as bills are referred to special congressional committees such as yours.

Committee members sought, and obtained, pertinent information and suggestions on each resolution. Deliberative hearings were conducted over a 10-day period. Expert witnesses were called. Those with conflicting views were heard. All available information was obtained and considered.

Committee recommendations were then drawn and submitted to a democratically elected delegate body. Here the committee's findings were further discussed, modified and in many cases—resubmitted for further committee deliberation before delegate action was taken.

This deliberative policymaking procedure—unique among organizations such as ours—virtually guarantees policies reflecting the thinking and judgment of a preponderant majority of Grange members. Likewise, the procedure enables us to base our recommendations upon the most reliable information available on technical and other factors about which, we as Grange people, may not have a thorough firsthand knowledge.

A policy statement resulting from the deliberative process just described states, in part * * *

"The Grange will urge adoption and implementation of a television channel allocation policy which will assure that existing television service to rural areas will be maintained and improved. Any proposal which may result in action impairing or destroying existing television service to rural areas will be vigorously opposed. We specifically oppose policy as set forth in FCC docket No. 14229."

Our studies clearly indicate that H.R. 8031 is * * * by both inclusion and omission * * * in conflict with objectives of Grange policy just quoted.

A provision of the bill is also in conflict with more basic Grange policy. Broad power it grants to the Federal Communications Commission to prescribe "minimum performance capabilities" for TV sets exceeds that which we feel necessary or advisable to assign to any Federal agency. It exceeds that necessary for the performance of what we regard as the responsibilities of the Commission; it likewise exceeds that necessary to achieve what we understand to be the aims of the legislation.

There is nothing in H.R. 8031 which will * * * "Assure that existing TV service to rural areas will be maintained and protected."

On the contrary, it is clear to us that the bill would encourage Commission action which would * * * "Impair or destroy existing television service" * * * in many rural areas; it would encourage implementation of policy set forth in FCC docket No. 14229 * * * policy specifically opposed by the Grange.

As members of this committee know, in docket No. 14229, the Commission has proposed to shift substantial parts or all existing VHF operations to a UHF basis.

It has already started proceedings aimed at "deintermixture" in eight major markets.

It has stated that upon completion of this action, similar proceedings will be initiated in additional markets or metropolitan communities.

The docket also states that at a later date "deintermixture" is to be applied on an area basis unless it is found that the entire Nation can be switched to an all-UHF system.

An expressed objective of this proposal is, of course, to expand total TV service through utilization of the many available UHF channels.

We definitely support this objective; we favor such expansion. However, it is not necessary to destroy existing (and potential) reception for many thousands of rural citizens in order to effectively utilize UHF channels.

If permitted, this proposed "deintermixing" would do serious damage to TV reception currently available to many rural people through VHF facilities. It is a well-established and a well-known fact that the effective range of a UHF station is little more than half that of a VHF operation. This means that in switching an individual VHF operation to a UHF channel, we destroy effective reception for persons in more than half the area served.

The effective TV service needs of these rural farmer citizens often exceed those of persons living in metropolitan areas. In addition to an interest in general news and entertainment, farmers have an actual operational need for TV reports on weather, markets, Government farm program regulations and others applying to their farming activities.

It is true that the utilization of UHF channels will permit the operation of a far greater number of stations. To citizens living in areas served, it will provide access to a greater variety of telecasts. Technically, under an all UHF system, it may be possible to operate the number of stations necessary to provide effective reception in all areas.

However, from the standpoint of practical economics, it is not feasible to operate the number of UHF stations necessary to reach all rural areas or even to reach all those now receiving effective VHF service.

Therefore, the feasible approach to objectives sought by this proposed action is through continued use of VHF channels along with an expanded use of UHF availabilities operating side by side in the same community.

We believe that the matter of receiver set capabilities referred to in H.R. 8031 and "deintermixture" plans set forth in FCC docket No. 14229 are an inseparable part of but a single problem.

Legislation recognizing, and based upon, this fact is proposed in H.R. 9267 and companion bills.

Provisions of these bills are in accord with National Grange policy. Through such legislation we can achieve desirable objectives of H.R. 8031. Equally, if not more important, we can preclude deintermixture action proposed in FCC docket No. 14229, action which would destroy existing and potential, effective reception for many thousands of rural citizens.

Thus, we earnestly urge committee approval of the more comprehensive, and what we believe to be a far more judicious, legislation embodied in H.R. 9267 and companion bills.

Mr. JACKSON. I am Jack Jackson. I represent the National Grange, with a membership of 750,000 persons, most of whom are rural people.

I am not an engineer and I am not a broadcaster, and I might add that I am not an attorney. I do not represent myself or my organization as one whose condition is based on a complete or expert knowledge of all of the many technical factors involved or at least related to the legislation proposed. However, we do have a first hand knowledge of the TV needs of rural people, and we have made a careful study of

other circumstances, developments, and proposals which we believe to be inseparable from the desirable aims of the legislation proposed.

As a result of these studies, we favor properly drawn all-channel legislation.

We oppose deintermixture in any form.

We likewise oppose H.R. 8031.

We favor legislation such as that embodied in H.R. 9267.

Thank you, sir.

Mr. SPRINGER. May I congratulate you on being a person that comes from the same kind of a territory I do, and who has spoken, I think, about as truthfully as you could for people who live in rural areas. And, above all, you said where you stood on both issues, and that is what we want to know.

The CHAIRMAN. Thank you very much, Mr. Jackson. We are glad to have your statement representing the great organization that you represent here.

Mr. William Harley?

STATEMENT OF WILLIAM G. HARLEY, PRESIDENT, NATIONAL ASSOCIATION OF EDUCATIONAL BROADCASTERS

Mr. HARLEY. Mr. Chairman, I have a prepared statement for the record. I would like to try and condense my oral comment to about a minute.

(The statement of William G. Harley follows:)

STATEMENT OF WILLIAM G. HARLEY, PRESIDENT, NATIONAL ASSOCIATION OF EDUCATIONAL BROADCASTERS

The National Association of Educational Broadcasters is an organization of broadcasting stations owned and operated by educational institutions and community organizations. Its membership includes colleges and universities in the United States engaged in open- or closed-circuit broadcasting, and many of the larger school systems throughout the Nation. The stake of the membership of the National Association of Educational Broadcasters in all-channel receiver legislation is very great. There is no doubt that the results of such proposed legislation will benefit the development of educational television, and the use of television for the improvement and upgrading instruction for years ahead.

The National Association of Educational Broadcasters has recently completed a national study of the needs of education for television channel allocations. The study encompassed the projections of a large proportion of the educational system of the United States. Approximately 700 of the leading colleges and universities were queried, along with all of the major city school systems and the 50 State school systems, and a significant number of smaller school districts in the United States. The results were definite as to the increasing needs of education, and as to the degree in which the educational community at all levels believes television instruction in some form can meet those needs. There was overwhelming evidence that in the decade or so immediately ahead educational television would play a significant part in helping education to meet the impact of increasing school populations, and in providing the kind of quality education essential to a democratic people in the approaching space age.

There are some 200 metropolitan areas in the United States with populations in excess of 100,000, and 270 smaller centers with more than 50,000 people. All these communities need educational opportunities which can be provided by television, and in many instances, only by television. Each community, whether large or small, urban or rural, has an equal right to such basic television facilities as can be made available.

Roughly three-fourths of the metropolitan areas of this country, most of the smaller communities, and almost all of rural America are without educational television. Each of these groups should have frequencies available for non-

commercial educational service when it can be established. However, under the present system of allocations and the necessary taboos and separations between channels, it is obvious that if all of these groups are to have the advantages of the educational and cultural opportunities which can be afforded them by educational television, they will have to depend to a large extent upon a mixture of VHF and UHF frequencies, with a predominance of UHF frequencies.

Aside from the problem of assignment and allocation, the greatest inhibition to the continued and rapid development of necessary television facilities in this area is the lack of compatible receiving equipment available. It is extremely important, if the great reserve of UHF frequencies are to be rapidly developed, that compatible, all-channel receiving equipment be made available to all peoples in all areas.

This is just as important to communities and rural areas which are now being served, or partially served, by VHF stations as it is to those areas which are completely intermixed. This is true because the areas now being predominently served by VHF cannot expand VHF service and any expansion in the noncommercial educational field must as a rule be in the UHF area.

It should be also emphasized that the increasing of heights of antenna and power in certain VHF assignments in order to extend the coverage area is in no way a solution to this problem. In the first place, because of geographic contours and other inhibitions to signal propagation, the fringe areas of these extended services usually have a substandard reception, and are certainly not as satisfactory as a more stable UHF signal would be serving the particular local area to which it was assigned.

Yet the only way that these local areas can be sure of stable, clear signals is to have a complete development of UHF frequencies and a complete availany closed-circuit system which might be used.

Compilation of the data derived from the national study showed a minimum need for 97 VHF and 825 UHF channels to be added to the presently reserved channels to meet the needs of education in the years ahead. This means, in short, that the minimum needs of education projected from a grassroots level, college by college and school system by school system, throughout this country will require at least 1197 television channels for open broadcast, in addition to any closed-circuit system which might be used.

It is obvious that the Federal Communications Commission will have a great deal of difficulty providing this number of channels at the required locations from the present pattern of usage. It is also obvious from our findings that VHF, however spaced, or UHF, however spaced, cannot provide in either category the necessary channels. It is plain that both the UHF and VHF channels will have to be used and developed to their fullest potential in order to meet this documented and growing need of education for such facilities.

I would like to suggest to this Committee that in the opinion of the NAEB it is extremely important that everything possible be done to develop and make full use of both of these areas of television frequencies, because this is the only way we will be able to provide for this country a noncommercial educational television service available to all the people. We feel that the requirement that all television receivers manufactured and sold in interstate commerce have facilities for reception on all frequencies is essential to this development. We feel that the development and availability of an all-channel receiver will provide the kind of desirable competition essential to a healthy broadcast industry, and at the same time will do much to make possible the available facilities needed by education to meet the requirements of the coming years. Because of this, I respectfully urge that this committee give serious consideration to the enactment of all-channel receiver legislation.

Mr. HARLEY. In Mr. Minow's testimony he referred several times to the national survey by the National Association of Educational Broadcasters, to study the needs of education for television channel allocations in the next 10 years or so. I would, therefore, like to submit for the committee's file a copy of this study.

(The study referred to will be found in the files of the committee.)

Mr. HARLEY. The compilation of that data showed a minimum need for 97 VHF and 825 UHF channels to be added to the presently re-

served channels, in other words, a total of 1,197 television channels to meet the needs of education in the years ahead.

It is plain that both the UHF and the VHF channels will have to be used and developed to their fullest potential in order to meet the documented and growing needs of education for such facilities. And we feel that the requirement that all television receivers manufactured and sold in interstate commerce have facilities for reception on all frequencies is essential to this development, and that the development and the availability of an all-channel receiver will provide the kind of desirable competition essential to a healthy broadcasting industry, and will do much to make possible the available facilities needed by education to meet the requirements of the coming years.

Finally, I, too, would like to express my appreciation to the chairman for his leadership, and to the entire committee for its assistance and continuing interest in the passage of the educational television legislation.

The CHAIRMAN. Mr. Harley, thank you very much for your very precise and brief statement. We are glad to have your further expression of interest in this program. And I might say that I used practically the same words as to the future.

Mr. Springer?

Mr. SPRINGER. Mr. Chairman, I just want to say that this is the thing that has been very close to me in the University of Illinois. We have been deeply interested in it, as you know.

And may I say that you have done a good job through the years. You haven't received as much encouragement as you should have, may I say, and I hope that the impetus we have put into it this week is going to give you a little bit of help when we get all through. I think there will be something which will at least move you off the center or move you along, because this is a tremendous field.

Now, did I understand, just briefly, Mr. Harley, that you are for the all-channel receiver legislation?

Mr. HARLEY. Right.

Mr. SPRINGER. What about deintermixture? I didn't quite get that.

Mr. HARLEY. Our position is essentially comparable to that of the Federal Communications Commission, as presented in Mr. Minow's testimony.

That is we look upon selective deintermixture as an interim approach to promoting UHF, but feel that all-channel receiver legislation presents the best long-range development solution. In certain instances in which deintermixture would be put into effect, we advocate having the deleted VHF channel made to serve as an educational outlet in the same or nearby community.

Mr. SPRINGER. Thank you.

The CHAIRMAN. Thank you very much.

The Chair would like to inquire if anybody else has any comments they would like to make on the subject, we would be glad to entertain them at this time.

We have a number of statements to be placed in the record.

First the statement presented by Kit Haynes for the National Council of Farmer Cooperatives.

(The statement referred to is as follows:)

STATEMENT OF THE NATIONAL COUNCIL OF FARMER COOPERATIVES

The National Council of Farmer Cooperatives wishes to take this means of expressing its views on a number of measures now under consideration by the House Committee on Interstate and Foreign Commerce dealing with proposed amendments to the Communications Act of 1934 to give the Federal Communications Commission regulatory authority over television receiving sets.

By way of identification, the national council is a nationwide organization of farmers' cooperative business associations which are engaged in the marketing of agricultural commodities or the purchasing of farm production supplies for their member-patrons, or both. Affiliated with the council are some 5,700 local, State, regional, and National agricultural cooperatives which serve 3 million farmer memberships.

The national council for many years has maintained an active interest in the type of radio service available to rural areas, and this interest was extended to television when such service became more widely available to farmers and rural residents. Our position with respect to both television and radio service is and has been one of vigorous support for the best possible services for farmers and rural residents, and in opposition to any actions which would tend to destroy or degrade existing services.

Members of this committee doubtless are aware that for many farm families radio and television have become more than sources of entertainment. These communications media have become important tools which are utilized daily in efficient production and marketing of food and fiber. They often provide the most direct, and certainly the fastest, link between the farm family and authentic and essential information regarding weather conditions, markets, both local and terminal, and with land-grant colleges, agricultural experiment stations and county agricultural agents. The latter, of course, are a key source of technical information relating to both production and marketing. Swift-moving developments currently taking place in agriculture make it imperative that farmers keep pace with technology and apply new techniques wherever possible to their individual operations.

The council's long-standing interest in broadcasting services available to farmers is based upon the wide use of such media by farmers making up the organizations we represent. Published data show that 99 percent of all Americans, including those living on farms and in small towns, now have access to at least one television signal, and that 94 percent of all television homes can choose among at least three television stations.

One of the major purposes of the bills being considered by the committee is to grant authority to the Federal Communications Commission to require that all television receiving sets moving in interstate commerce or imported after the effective date of the legislation be capable of receiving both ultrahigh frequency (UHF) and very high frequency (VHF) signals.

The national council favors legislation which will require that all television receiving sets moving in interstate commerce or imported must be capable of receiving both UHF and VHF signals. This support is predicated on our recognition of the need for expansion of the Nation's television broadcasting system—a need which will become increasingly urgent in the future. To accommodate such expansion, an increase in the available broadcasting channels is necessary. But it is our sincere desire that this expansion be brought about without damaging or eliminating the service which now is provided to farmers and other rural residents largely by VHF stations. It is our firm belief, based on the best engineering data we can obtain, that maintenance of existing VHF stations is essential if farmers in many areas of the Nation are to continue to receive the television service now available to them.

The council's current policy statement on the subject of television broadcasting, adopted at our 1961 annual meeting at New Orleans, La., and reaffirmed at our 1962 annual meeting at San Francisco in January, stated in part:

"The council believes that adequate television service can be provided to rural areas only if mileage separations between stations are maintained at distances proved by existing engineering standards to be sufficient to prevent interference between signals, *and if the channels currently providing service to agriculture, channels 2 through 13, are maintained intact without downgrading of present service.* For this reason, the council calls upon the Congress and the

Federal Communications Commission to take no actions which in any manner will tend to impair the broadcasting services, both radio and television, now available to farmers and residents of small towns. We call upon the Congress and the Commission, instead, to direct their efforts in this important field toward improving and expanding broadcasting services to rural areas." [Italics supplied.]

In line with this policy, the council supports H.R. 9267 and identical bills, H.R. 9277, H.R. 9291, H.R. 9293, H.R. 9322, H.R. 10219, H.R. 10429, and H.R. 10532, which would authorize the Federal Communications Commission to require all-channel receivers but, at the same time, would restrict authority of the FCC to delete any previously assigned VHF television channel in order to replace it with a UHF channel. As was the case at the time when the policy cited above was adopted, the council steadfastly maintains that farmers and other rural residents in areas reached only by VHF signals are entitled to at least the television service they now are receiving.

We respectfully suggest that the committee, in its consideration of the several bills now before it, direct its efforts to developing and reporting a measure which will: (1) Grant to the FCC authority to require all-channel receivers; (2) provide for expansion of television broadcasting in a sound and orderly manner through addition of UHF stations as may be required to meet adequately the needs of America's expanding population; and (3) preserve the present VHF channels and facilities on which so many rural people must depend for television service.

We sincerely appreciate this opportunity to present our views on these important matters to this committee.

The CHAIRMAN. The statement of Payson Hall, executive vice president of Meredith Publishing Co., and president of the Meredith Broadcasting Co., will be placed in the record.

(The statement of Payson Hall follows:)

STATEMENT OF PAYSON HALL ON BEHALF OF THE MEREDITH PUBLISHING CO.

My name is Payson Hall. I am executive vice president of Meredith Publishing Co. and president of its wholly owned subsidiary, Meredith Broadcasting Co. We have been in the television business for many years as licensees of stations in Kansas City, Mo. (KCMO–TV), Omaha, Nebr. (WOW–TV), Phoenix, Ariz. (KPHO–TV), and Syracuse, N.Y. (WHEN–TV).

The views of our company on all-channel receiver legislation and related proposals to encourage development of UHF television have been fully stated in comments filed before the Federal Communications Commission on February 19, 1962. In those comments we have expressed our grave concern as to the implications of the proposed legislation to give the Commission power to bar from interstate commerce television receivers not equipped to receive both VHF and UHF television signals. At the same time, we have expressed our support for other steps taken or proposed by the Commission to foster development of UHF. I take the liberty of attaching a copy of our comments before the Commission, and incorporating them by reference in this statement.

Before the Federal Communications Commission, Washington, D.C.

Docket No. 14229

IN THE MATTER OF FOSTERING EXPANDED USE OF UHF TELEVISION CHANNELS

COMMENTS OF MEREDITH BROADCASTING CO. ON NOTICE OF PROPOSED RULEMAKING

Meredith Broadcasting Co., licensee of television stations KCMO–TV and KPHO–TV, and corporate parent of the licensees of television stations WOW–TV and WHEN–TV, has the following comments on the notice of proposed rulemaking released herein on August 3, 1961.

1. Meredith Broadcasting Co. (hereinafter referred to as Meredith) strongly endorses the Commission's overall objective of fostering the healthy development of service in the UHF television band. It is believed that the 70 UHF

channels are indispensable to the development of a complete television system which adequately reflects the needs of the Nation for (1) diversified programing and (2) for essential program services. In this connection, as will be developed more fully below, Meredith believes that the effective development of networks of educational television stations throughout the myriad educational centers and the several States can only be accomplished by utilization of the UHF television spectrum.

2. Meredith's agreement with the Commission's broad objective that the UHF television spectrum be utilized is based primarily on the supposition that the Commission actually has in mind good and sufficient uses as directed by congressional mandate in section 303(g) of the Communications Act. In this section the Commission is told to "encourage the larger and more effective use of radio in the public interest." In all candor Meredith finds itself unable to support some of the subsidiary measures proposed by the Commission and Meredith believes that there are implications in the notice of proposed rulemaking which generate "landmark" issues to challenge the business community as a whole. In particular, Meredith cannot support the proposed legislation to require that all television receivers to be shipped in interstate commerce be equipped to receive both UHF and VHF signals. The proposal involves a serious intrusion upon areas traditionally left to free enterprise and an abuse of the power to regulate interstate commerce vested in the Congress by the U.S. Constitution.

3. We know of no other instance where Congress has conditioned the basic right of transporting goods in interstate commerce on compliance with regulations as to manufacture where there is no element of public health or safety involved. It is indeed one thing to invoke the commerce clause to prevent prostitution and auto thievery—and to curb the unlawful gambling element by preventing interstate movement of slot machines—but television receivers are not "one-armed bandits" and criminal opprobrium does not attach to television operation. If Congress and its agencies are once permitted to impose such sanction over legitimate business, it is difficult to see how any expansion of Federal power over business could be logically resisted. Meredith does not believe that the UHF–VHF problem, at this late date, should now be solved by legislative fiat. It would hardly be suggested that owners of television stations could be compelled to purchase and install converters to facilitate UHF reception or that the public may be compelled to listen to UHF stations. It is almost as unreasonable to say that manufacturers should be required by law to produce only so-called all-channel receivers with the result that the general public will be forced to purchase such receivers or none at all. In fact, the basic rule that the Constitution must be "reasonably" interpreted and applied is outraged by this proposal. For example, the UHF educational station licensed to State College, Midtown, U.S.A., desires to serve only its student body area extending in a radius of 30 miles from Midtown. In this case a very inexpensive one-channel receiver could take care of the educational requirement. Based upon this example, situations involving economic hardship may be extrapolated of such great number as to be limited only by the permutations of the actual allocations of stations. It seems unfair, discriminatory, and altogether unwise to burden all citizens with the very substantial cost of universal all-channel receivers to aid the undefined few.

4. Meredith is concerned with the implications in the notice of proposed rulemaking and other pronouncements of the Commission and its members which create the impression that television service is woefully inadequate today so that heroic measures may be required, including even the possibility of a shift of all television to the UHF band. Meredith respectfully disagrees both with the premise and the possible solution.

5. In the United States today there is more television service and more diversity of television service than in any other country in the world. Some 99 percent of our people are within the coverage area of at least one television station. Some 98 percent of television homes have a choice of at least two stations, and some 94 percent of television homes can choose among three or more television stations. This is a record to be proud of, and it is a disservice to obscure this record with undue emphasis upon the number of markets which have only one station or two stations with local transmission facilities. To be sure, local outlets for expression are important, but of primary importance is the availability of as many choices of service as are technically and economically feasible with-

out degradation of quality of service. All who have listened to the programs of some AM stations in markets saturated with 15 or 20 AM services are aware that quality of service does not necessarily go hand in hand with extreme competition.

6. If the remarkable achievements of the television industry in the United States are viewed in proper perspective it becomes evident that we are not faced with a crisis justifying hasty or ill-considered solutions. There is a need for more service in certain markets and certain areas and such service will be largely achieved through the Commission's program of selective drop-ins of VHF stations and selective deintermixture of markets now primarily oriented to UHF reception.

7. Without attempting to take a position on the specific proposals which the Commission has made in various individual proceedings in which Meredith is not directly involved, Meredith desires to express its general support for the Commission's efforts to alleviate concrete problems of shortage of service through concrete, ad hoc solutions. In the Syracuse market where a Meredith station (WHEN–TV) operates, Meredith has cooperated fully with the Commission in implementation of a reallocation to permit the early inauguration of a third station in Syracuse. Meredith is of the view that the Syracuse solution, which has involved only a trivial departure from mileage separation standards and provides a more efficient utilization of television channels, is an excellent example of the manner in which provision for additional television service can be made wisely.

8. We turn now to a discussion of certain of the steps listed by the Commission to foster development of the UHF band:

"(1) Recognition and acceptance of the principle that the UHF–TV spectrum is indispensable to the achievement of a nationwide fully competitive television service."

9. Meredith is entirely in accord with the principle stated as far as it goes, but believes that it should be broadened to read as follows:

"Recognition and acceptance of the principle that both the VHF and UHF bands are indispensable to the maintenance and improvement of a nationwide competitive television service."

The differences between the Commission's formulation of the principle and the revised formulation just stated are significant. In the first place, it is believed that every informed and objective student of television technology would agree that to obtain high quality, reliable wide-area television service, continued use of the VHF band is essential. Moreover, shift to an all-UHF system would also place all U.S. television stations near the Canadian and Mexican borders at a tremendous competitive disadvantage with VHF stations in Mexico and Canada which provide service to the United States. We are not aware of any plans in Mexico or Canada to shift to all UHF. If U.S. stations should be shifted to UHF, many more VHF channels would become available for Mexican and Canadian use. At the same time, if sound mileage separation standards are maintained, it is abundantly clear that the 12 VHF channels are not sufficient to satisfy the demand and ability of the country to support television stations serving the public generally. As the importance and complexity of education increase by geometrical progression, the need for dissemination of culture and education through mass communications media becomes critical. The inevitable and indeed the stark requirements of education are now foreseeable. We know that the television broadcasting spectrum cannot be extended. The solutions of education problems should not be foreclosed in an attempt to impose an unduly extended commercial competitive system on the economy of the Nation.

10. Meredith believes that in the next decade vast networks of educational stations in the UHF band will bring UHF to full maturity on a nationwide basis. The suggestion that educational stations utilize UHF is not based upon the premise that UHF is inferior to VHF and that education should be relegated to the inferior band. It is based upon the simple fact that the existing VHF channels are, for the most part, already utilized for general television purposes while the UHF band remains to a considerable degree unused. Instead of disrupting existing services and embroiling the Commission and station licensees in endless license modification proceedings, and putting the public and the broadcaster to unprecedented and unwarranted expense, the Commission should place emphasis upon effective utilization of the UHF band through stations devoted

to educational purposes. If educational stations are activated in the UHF band, this will prove a powerful stimulus to conversion of sets and the inauguration of UHF stations to provide general program fare. The recent announcement of the activation of a commercial UHF channel in Washington, D.C., in the wake of the inauguration of a successful educational UHF station in that community is an example of a trend which could become nationwide.

11. If the needs of education for television channels are realistically appraised, it becomes evident that the 70 UHF channels could not possibly satisfy both educational needs and the needs for more general television services now rendered by commercial stations. A great deal of scattered documentation exists with respect to educational television requirements and plans. We now summarize a cross-section of the published documentation, having in mind, of course, that more than a score of States and many more communities and institutions have elaborate plans "in the mill" for the utilization of educational television broadcasting facilities. And even in the educational field a great new problem is arising—providing facilities for instructional television broadcasting stations, as distinguished from general purpose educational stations.

12. Demands for the reservation of additional UHF television channels are being made by noncommercial, educational television interests even at this time to such an extent that it is evident the requirements curve is exponential, and the Commission already is faced with the dilemma of limited television broadcasting spectrum versus unlimited education requirements therefor. A proposal for the reservation of more than five times the number of existing UHF education channel assignments is made in a study recently submitted to the Department of Health, Education, and Welfare by the National Association of Educational Broadcasters. This proposal has not been formally tendered to the Federal Communications Commission for rulemaking. Nevertheless, the extent of present demands by educational television groups for more UHF channel reservations indicates that the long-range NAEB projections are actually understated.

13. The NAEB study shows that at present 275 channels are reserved for noncommercial educational television use. Eighty-eight are VHF channels and the other 187 are UHF channels. The NAEB estimates that almost 1,000 outlets will be required to provide an adequate nationwide educational television service. The bulk of these additional assignments must come from the UHF spectrum and the NAEB contemplates a total of 825 additional UHF channel reservations, plus 97 additional VHF channel reservations. Engineering studies made by the association, however, indicate that only 608 UHF and 48 VHF channels are actually available for the purposes envisioned by educational broadcasters without wholesale deletion of existing UHF allocations for commercial stations.

14. The NAEB estimates must be considered conservative indeed in the light of present demands for educational television channel reservations, particularly in the UHF portion of the spectrum. To date three States have presented formal proposals for wholesale reservations of UHF channels for statewide educational television networks. The States are Florida, Georgia, and Kentucky. Similar proposals are being considered by State authorities in a number of other States, and in several instances proposals for UHF channel reservations will probably be made by nongovernmental agencies such as private educational organizations.

15. The 3 statewide UHF reservation plans entail a total of 29 UHF channels. It must be noted that there are already nine UHF channels reserved for noncommercial, educational television in the three States, and the proposals are to add more channels.

16. Another significant feature of the three statewide UHF reservation plans is that in many instances channels now allocated for commercial use would be deleted. A total of 27 channels now allocated for commercial television broadcasting would be deleted in order to accommodate the demands expressed by the three States for noncommercial educational channel reservations. The total is a net figure which makes allowance for a few instances in which commercial channels would be replaced by other commercial channels. In most cases, however, the commercial channels would be deleted without any replacement.

17. Some idea of the nature and extent of the demands voiced by State educational authorities for more UHF channel reservations may be gained by reference to the following tabular summaries of the three statewide proposals now pending before the Commission:

PROPOSAL OF THE STATE OF GEORGIA

Georgia State Department of Education requests	Channel		Georgia State Department of Education requests	Channel	
	Add	Delete		Add	Delete
Jasper, Ala.	----	17	Dublin, Ga.	----	15
Marianna, Fla.	----	17+	Fort Valley, Ga.	----	18+
Albany, Ga.	----	25	Pelham, Ga.	*14−	----
Americus, Ga.	----	31	Swainsboro, Ga.	----	20−
Ashburn, Ga.	*18+	----	Tifton, Ga.	----	14−
Cochran, Ga.	*15	----	Warm Springs, Ga.	*17+	----
Dalton, Ga.	*18−	25+	Wrens, Ga.	*20−	----
Dawson, Ga.	*23	----	Burnsville, N.C.	----	18
Douglas, Ga.	----	32−	Athens, Tenn.	----	14+
Draketown, Ga.	*14+	----	Murfreesboro, Tenn.	----	18−

* Noncommercial station.

PROPOSAL OF THE STATE OF FLORIDA

Florida Educational TV Commission requests	Channel		Florida Educational TV Commission requests	Channel	
	Add	Delete		Add	Delete
Boca Raton	*25	----	Lake Wales	42	14
Bradenton	*28−	28−	Leesburg	*26−	26−
Cocoa	*14	----	Madison	*21+	----
Fort Lauderdale	43	39	Marianna	*17+	17+
Fort Myers	*16+	----	New Smyrna Beach	*18	----
Fort Pierce	*31+	----	Ocala	*15+	15+
Lake City	*33+	33+	Orlando	63	18
Lakeland	55	16+	Palataka	*17	17

*Noncommercial station.

PROPOSAL OF THE COMMONWEALTH OF KENTUCKY

Commonwealth of Kentucky requests	Channel		Commonwealth of Kentucky requests	Channel	
	Add	Delete		Add	Delete
Ashland	*59−	59−	Morehead	*24+	----
Covington	*54−	----	Murray	*33−	33−
Bowling Green	*17+	17+	Pikeville	*14−	14−
Hazard	*19−	19−	Somerset	*29−	29−
Madisonville	*26	26	Cincinnati, Ohio	----	54−
Maysville	82	24+			

*Noncommercial station.

18. Numerous proposals for the reservation of single UHF channels for noncommercial, educational television use have been made by municipalities, colleges, and other groups. While these proposals are less extensive and complex than those of the States of Florida, Georgia, and Kentucky, a significant demand for additional UHF channels is represented. Again, in many instances, UHF channels which were formerly available for commercial broadcasting use have been reserved—without replacement—for noncommercial, educational television broadcasting.

19. The following tabulation shows noncommercial educational proposals for UHF channel reservations which have been filed and are now pending and those which have been adopted by the Commission in the period between January 1, 1961, and February 1, 1962.

Recent actions and proposals for reservation of UHF television channels for noncommercial educational use, Jan. 1, 1961–Feb. 1 1962

City and State	Proposal	Status
Corning-Elmira, N.Y.	Reserve channel 30 (delete as Elmira commercial channel).	FCC has issued notice of proposed rulemaking.
San Mateo, Calif.	Reserve channel 14 (delete as Modesto commercial channel).	Do.
Miami, Fla.	Reserve channel 14 (delete as Fort Lauderdale commercial channel).	Do.
Austin, Tex.	Reserve channel 18 instead of 70.	FCC ordered Oct. 23, 1961.
Bay City, Mich.	Reserve channel 19 instead of 73.	Final FCC order awaited.
Athens, Ohio.	Reserve channel 20 (delete as Coshocton, Ohio, commercial channel).	FCC ordered Oct. 16, 1961.
Eugene, Oreg.	Reserve channel 20 (delete as Eugene commercial channel).	Final FCC order awaited.
Ogden, Utah.	Reserve channel 24 (formerly a commercial channel in Ogden).	FCC ordered June 30, 1961.
Lexington, Ky.	Reserve channel 46 (delete as Bristol, Tenn., commercial channel).	FCC ordered Sept. 11, 1961.
Newark, Ohio.	Reserve channel 28 (delete as Lancaster, Ohio, commercial channel).	FCC ordered May 1, 1961.
Albany, N.Y.	Reserve channel 23 (delete as an Albany commercial channel).	Final FCC order awaited.
Milwaukee, Wis.	Reserve channel 36.	FCC ordered Mar. 1, 1961.

20. The Commission may rightly be expected to grant the majority of the requests for additional UHF television channel reservations which are now pending and those which will follow. It has done so in the past in carrying out its firm policy of encouragement of educational television. And even greater emphasis on the stimulation of educational television may be expected in the future. As stated in the Commission's 27th Annual Report to Congress covering the fiscal year 1961:

"During the 9 years since 1952, when it first provided for noncommercial educational TV operation, the Commission has made special effort to encourage the development of this service. Though 273 channels are reserved for this purpose, only slightly more than 50 ETV stations are on the air. However, their success is an incentive to other educators to speed their plans to take advantage of this modern visual teaching medium.

* * * * * * *

"On October 25, 1961, the Commission established an Educational Broadcasting Branch, reorganizing its former Economics Division as the Research and Education Division for that purpose."

21. The Commission's determination to assist and encourage the development of noncommercial, educational television broadcasting has received the support of the President. In his message on education submitted to Congress on February 6, 1962, the President stated:

"The use of television for educational purpose, particularly for adult education, offers great potentialities. The Federal Government has sought to further this through the reservation of 270 television channels for education by the Federal Communications Commission and through the provision of research and advisory services by the Office of Education. Unfortunately, the rate of construction of new broadcasting facilities has been discouraging. Only 80 educational TV channels have been assigned in the last decade. It is apparent that further Federal stimulus and leadership are essential if the vast educational potential of this medium is to be realized. Last year an educational television bill passed the Senate, and a similar proposal was favorably reported to the House. I urge the Congress to take prompt and final action to provide matching financial grants to the States to aid in the construction of State or other nonprofit educational television stations."

22. If legislation providing for Federal aid for the development of educational television facilities is adopted by the Congress, it may reasonably be assumed that the remaining 47 States will make demands for UHF channel reservations for statewide educational television networks similar to those of Florida, Georgia, and Kentucky. The history of matching grants by the Fed-

eral Government shows that such grants stimulate State appropriations. Many of the highly populated States now have only a fraction of the number of channels which may reasonably be required. Maryland, for example, has only one educational television channel reservation—No. 66 in Baltimore. Delaware has one. There are only 9 in California, and 10 in New York. New Jersey has only 6, and Illinois has 7. The same situation prevails in all other States, the maximum number of channels (both VHF and UHF) assigned to a State being 18 to Texas.

23. The task of finding additional UHF channels for these States is not an easy one. As indicated in the Florida, Georgia, and Kentucky plans, wholesale displacement of existing commercial channels is required in order to make additional channels available for educational use. New developments may make it even more difficult to secure enough UHF channels to supply the needs of educational interests. One such development is the use of UHF channels for airborne television instructional use. At present an experimental system is being operated by Purdue University, and test data supplied to date indicate that reception up to 200 miles from the airborne transmitter is entirely feasible. The range obtainable with such a system may require major revisions in the present allocation standards for UHF channels since the maximum cochannel separation between UHF channels is only 155 miles, and a major extention of this limitation may be required if the airborne system is to achieve maximum effectiveness out to the 200-mile range.

24. The UHF portion of the spectrum offers the only medium for the addition of educational television facilities to a major part of the Nation. As reported by the National Educational Television and Radio Center in its fall 1961 report on current developments in educational television, half of the six cities having population in excess of 300,000 have no VHF channels reserved for educational use. They must look to UHF for educational television channels. In each of these cities, including Philadelphia, Los Angeles, Cleveland, and Washington, to name a few, there is at present only one UHF educational outlet. In several major metropolitan areas, a demand has been made for multiple reservations. Pittsburgh, Pa., is an example. This demand is bound to increase with the advent of purely instructional stations.

25. Even with a VHF educational station in operation in Pittsburgh, educational television has provided a demand for a second channel there and a UHF educational station is currently operating in the city. A third channel, also UHF, is being sought at present for educational use in Pittsburgh. Such multiple use is not confined to the larger metropolitan areas. In smaller cities such as Ogden, Utah, Oklahoma City, Okla., and Tacoma, Wash., there are two UHF educational stations in operation. Thus, it may be said that there will be an increasing demand not only for one educational channel per city, but in many areas, two or more.

"(2) Encouragement of the use of UHF facilities through the creation of all UHF areas in markets where multiple services would probably develop if sufficient comparable facilities, not possible under present conditions, can thereby be made available. This involves an expanded program of deintermixture."

26. Meredith supports in principle the objective of encouragement of most carefully planned expansion of commercial UHF through selective deintermixture to encourage a reasonable program of industry competition and to provide diversity of local and general program service. It is recognized that development of the art and of public acceptance as well as encouragement of voluntary manufacture of receivers capable of receiving UHF are important if commercial utilization of the UHF band is to be expedited. The Commission and the industry have learned that under existing conditions commercial UHF stations have difficulty competing in areas served by multiple VHF services. At the same time, in the areas receiving predominantly UHF service, healthy competition is encouraged through reassignment of VHF channels elsewhere. VHF channels are thus made available for "drop-ins" in predominantly VHF areas where additional service is needed. Selective deintermixture will also assist the development of UHF for educational purposes since it will help to break down the barriers of reception which have thus far plagued the development of UHF.

27. In Meredith's view selective deintermixture is to be preferred over other possible solutions which have been advanced for providing additional service. General degradation of mileage separations would, among other objectionable results, deprive rural areas of service. Selective exceptions to mileage standards must take place only under carefully controlled conditions to avoid repeti-

tion of the unhappy experience in the AM spectrum where degradation of normally protected contours has been the rule rather than the exception.

28. Selective deintermixture is certainly to be preferred over the wholly unacceptable "solution" of a complete shift to UHF. The solution for a shortage of channels does not lie in the elimination of the 12 most useful channels now allocated to television. It lies rather, in the more efficient utilization of UHF channels. Selective deintermixture is one of the principal methods by which such an efficient adjustment of service requirements can be accomplished.

"(3) Confining interim assignment of additional VHF frequencies at substandard spacings to the most pressing cases of need for early competitive outlets in the major markets where there are already two VHF stations and where the addition of a third VHF station would not impinge significantly upon existing UHF service."

29. It has been indicated above in the discussion on selective deintermixture that Meredith supports the exercise of rigorous control in authorizing short VHF "drop-ins." It would be inappropriate for Meredith to comment on the specific situations in cities where it has not stations and as to which the Commission has proposed VHF "drop-ins" or has rejected requests for "drop-ins." It is sufficient to say that Meredith supports the third objective as stated by the Commission and believes that the implementation of that objective has thus far been generally sound.

"(4) Relaxation of some of the technical requirements for UHF broadcasting, thereby making possible the construction and operation of UHF stations at lower cost."

30. Meredith supports in principle the relaxation of technical requirements as to UHF operation where such relaxation can be accomplished without loss of signal quality. Expense of construction and operation has undoubtedly been a dampening factor in the development of UHF. Meredith takes no position as to the specific modifications of technical requirements proposed.

"(5) Permitting VHF stations to operate parallel UHF outlets in the same community under waivers of the duopoly rule. This will involve earmarking for such dual operations enough UHF channels to provide a UHF outlet for each existing VHF station, as well as for all holders of VHF construction permits. This pool of channels for commercial use will be reserved for a period of 3 years from the effective date of legislation authorizing the Commission to fix standards for television receivers shipped in interstate or foreign commerce if such be passed or until December 31, 1965, whichever date shall first occur."

31. Meredith opposes this proposal. For the reasons stated at the beginning of these comments, Meredith cannot support the Commission's proposal for all-channel receiver legislation.

32. Since Meredith is confident that the Commission would not conceivably encourage a permanent duopoly situation, the conclusion is irresistible that advocacy of dual operation rests upon an unarticulated premise that the duopoly will eventually be eliminated by elimination of all VHF stations. Meredith must, therefore, oppose the duopoly proposal.

"(6) Earmarking sufficient additional UHF channels to provide for educational needs, taking account of an updated assessment of those needs now being undertaken by educators."

33. Meredith wholeheartedly supports this proposal. For reasons stated earlier in these comments, Meredith believes that the future of educational television lies predominantly in the UHF band. The future is vital to the national wlfare and all channels which may be needed for education should be conserved as a natural resource for a period adequate to permit orderly development.

"(7) Elimination of the table of UHF channel assignments and substitution in its place of an assignment system under which anyone desiring to build a station in a particular community may apply for the lowest locally available UHF channel without antecedent rulemaking.

"(8) Eliminating comparative hearings for UHF channels to the end that a qualified applicant will be granted any channel for which he has applied before anyone else. Such construction permits will be canceled unless the station authorized is built within the time specified therein or any extension thereof granted for good cause shown."

34. Meredith finds itself unable to support these interrelated objectives, the ramifications of which do not appear to have been carefully considered.

35. It would seem that objective (8) is unsound and is contrary to much of the policy thinking of the Commission's leadership in other areas. Determina-

tion of who is to be licensed for what must be assumed to be a valuable frequency should hardly be determined by relative position in a queue waiting all night at the offices of the Commission to file on the day when the rules go into effect. The approach places an emphasis on speed and minimum qualifications which cannot be reconciled with traditional Commission principles. The proposed policy could become unfair in application if the Commission, at some later date, were to hold comparative hearings at the time of renewal and take away licenses which it initially granted on such a casual basis.

36. If, as urged herein, the proposal in objective (8) is unsound, it would appear that the proposal in objective (7) should be reexamined in order to determine whether the elimination of the table of assignments would aid or hinder the underlying objective of speeding up the issuance of UHF grants. The television assignment plan, for all its faults, did reduce the number of hearings and assisted materially in the speedy inauguration of additional services. The abandonment of the FM allocation plan has not be an unqualified success, as is clearly demonstrated by the presently pending proposal for a new kind of allocation plan, which, in some ways, is more rigid than the previous table of assignments.

37. "(9) Employing UHF translators as the preferred means of bringing television service to any remaining white areas."

Meredith supports the Commission's proposal to encourage use of UHF translators and if it proves feasible, on lower channels, but the demand for UHF channels, particularly for educational purposes, may be so heavy as to preclude assignment of lower channels for translators on a permanent basis.

* * * * * * *

38. The Commission has been considering for many years various proposals for increasing television service. The Commission is to be heartily commended for undertaking a comprehensive review of the problem in the present proceeding. Meredith believes, however, that the time has come for the Commission to chart clear-cut and unambiguous objectives and procedures for obtaining those objectives.

39. There have been bewildering conflicts of approaches by the Commission over the past few years which have created uncertainty in the industry and the public and have contributed as much as anything else to the failure of the UHF service to grow and develop on a healthy basis. The Commission has wavered. Deintermixture proposals have been bravely advanced, coldly rejected, enthusiastically revived, and then allowed to languish in interminable proceedings. Short VHF separations have been proposed as "interim solutions" but the "interim" between the proposals and their implementation has extended into periods of years.

40. Now that the Commission has embarked upon what appear to be realistic and soundly conceived drop-in and deintermixture proceedings in a number of markets, the industry and the public might have reason to take heart. Yet, at the same time, the Commission talks darkly of a possible shift to all-UHF which would wholly disrupt service and render futile most of the steps now being taken by the Commission.

41. If the Commission were seriously considering a shift to all-UHF, it would be wholly improvident to encourage any elaborate, expensive, and time-consuming drop-in and deintermixture proceedings. By the same token, if the Commission were seriously considering a shift to all-UHF, it would hardly be justifiable to suggest that UHF stations should initially be licensed on a first come, first served basis wholly in disregard of comparative merit. Such an approach would make mockery of the seriousness with which the Commission considers licensee qualifications in the competitive and renewal hearings which it regularly holds.

42. It must, of course, be recognized that no Commission can bind a future Commission and that freedom of action must always be preserved to meet changing public interest requirements. Consistent with these limitations, however, Meredith urges that the Commission issue a solemn and unequivocal statement of principles with respect to television allocations which would embrace the following:

(*a*) Recognition and acceptance of the principle that both the VHF and UHF bands are indispensable to the maintenance and improvement of a nationwide competitive television service. Assurances to this effect are needed from responsible Government authorities, so that broadcasters will continue to assume the risks and make the commitments, in terms of both capital and human resources, that will guarantee the public superior television service.

(*b*) Encouragement of development of UHF without coercion and without sacrifice of traditional principles with respect to diversification, and with respect to selection of licensees.

(*c*) Encouragement of utilization of the UHF band by educational stations in every manner possible, including reservation of UHF channels where there is a reasonable prospect of educational utilization in the future.

(*d*) The expansion of existing service through appropriate VHF drop-ins involving minor departure from minimum separation standards with suitable protection of cochannel and adjacent channel stations. Such modifications should be rigidly restricted to correcting critical situations.

(*e*) Selective deintermixture to strengthen UHF in markets where service is predominantly UHF at present and utilization of VHF channels made available as a byproduct of such deintermixture in areas where additional VHF service is needed.

Respectfully submitted.

MEREDITH BROADCASTING CO.,
By HALEY, WOOLENBERG & BADER,
/s/ ANDREW G. HALEY,
Their Attorneys.

FEBRUARY 19, 1962.

The CHAIRMAN. Plus we have statements submitted by two of our colleagues, Mr. Hébert and Mr. Boggs, of Louisiana. Their statements, along with statements submitted by Martin Essex, Robert E. Shuff, John C. Lynn, Howard T. Head, Angus McDonald, Mort Farr, George R. Townsend, and Merritt Milligan, will appear at this point in the record.

(The statements referred to above are as follows:)

HOUSE OF REPRESENTATIVES,
Washington, D.C., March 12, 1962.

Hon. MORGAN MOULDER,
Chairman, Subcommittee on Communications and Power,
House Committee on Interstate and Foreign Commerce,
Washington, D.C.

DEAR MR. CHAIRMAN: We should like to submit the enclosed statement for inclusion in your record of hearings on H.R. 9267 and similar bills.

We commend it to the attention of the members of your subcommittee and ask that the views expressed be given every consideration in connection with your study of this legislation.

With kind regards, we are,
Sincerely,

F. EDWARD HÉBERT, *Member of Congress.*
HALE BOGGS, *Member of Congress.*

COMMENTS ON VHF-TO-UHF TRANSPOSITION

Over the past few years there have been many who have advocated various means of encouraging the development of telecasting in the UHF portion of the spectrum. In this connection, there is substantial support for legislation requiring that all television receivers shipped in interstate commerce be capable of receiving signals in both the VHF and UHF bands. In addition, great pressure is being brought to bear against the Federal Communications Commission to remove all commercial television stations from the VHF portion of the spectrum. In our opinion, there is much to be said for the position that the public interest will be served by encouraging the further development of telecasting in the UHF band. This is particularly true in areas which are not receiving adequate television service and apparently cannot, if telecasting is limited to the 12 VHF channels presently allocated. However, it is our conviction that if, by Commission action or by legislation, all commercial television stations are required to be moved from the VHF portion of the spectrum, the consequences will be disastrous to the viewing public. The situation in Louisiana is quite apt.

Attached are two maps illustrating the areas where persons presently receiving television service would be deprived of that service if existing VHF stations were required to move to the UHF portion of the spectrum. It is obvious that

tremendous numbers of people in Louisiana would be deprived of service. The only way that this service could be replaced would be by the allocation of additional UHF channels to the outlying areas now being served by the VHF stations, which stations would either have to be operated by residents of local communities, or as satellites of the nearby metropolitan stations. In effect, these additional UHF facilities would, in all likelihood, have to form a ring about the present VHF stations in order to replace the lost service.

It is questionable whether these additional UHF stations could be operated as independent stations by residents of the rural communities, since there would not be a sufficient base to support service comparable to that now being rendered. As documentation of this fact, when a VHF television channel was allocated and assigned to the community of Houma, the station was not constructed and every attempt was made to move the channel either to New Orleans or to Baton Rouge.

If these additional UHF channels were licensed to stations headquartered in the metropolitan areas and operated as satellites, it would take five, six, or seven UHF channels to substitute for one VHF channel, and the relative advantage of the UHF spectrum, in terms of abundance of channels available within it, would evaporate. The number of channels required to restore presently existing service would be so great as to leave few, if any, available for the expansion of new forms of television service in the years to come.

Furthermore, the quality of service now rendered by the metropolitan VHF stations in our State would doubtless be impaired. Either their economic base would be reduced, in the event their service area were curtailed, or the expense structure would be overburdened by the necessity of building and operating multiple transmitting plants in place of one. A reduction of income, or increased pressure on expenses, would doubtless bring about the same result: a reduction in the metropolitan station's ability to render service equivalent to that of today.

It is for these reasons that, while we do not oppose, and, in fact, favor legislation that would encourage the development of telecasting in the UHF band by the requirement that all television receivers shipped in interstate commerce be capable of receiving signals in both UHF and VHF bands, we strongly oppose any administrative or legislative requirement that all television, including present VHF television, be transferred to the UHF band.

STATEMENT OF MARTIN ESSEX, SUPERINTENDENT OF SCHOOLS, AKRON, OHIO

With the ascending importance of television as a medium of mass communications and its colossal impact on our society, this committee bears tremendous responsibility for the 180 million Americans of the present and the 200 to 300 millions of the near future.

Being aware of the very difficult decisions that confront the members of this committee in trying to assure an adequate television service for this country, I appreciate your affording me the opportunity to express some of the concerns of the people of Akron.

For some time I have been disturbed about the lack of an adequate television facility in the large Akron metropolitan area. Regrettably, the many studies of allocation problems over the past several years have accomplished nothing with respect to this inequitable situation.

The serious shortage of usable television channels, of course, is only one of the critical and complex problems of our large urban centers. To the extent that it represents a lack of adequate communication, however, this one problem relates to the whole pattern of insensitivity, indifference and intercultural strife that characterizes much of the mobile population today. In other words, our urban centers are in trouble, and the civic unity characteristic of many American communities is giving way to social disruption.

Form at least the time when Jefferson so eloquently verbalized it, Americans have associated the indispensability of mass communications with the survival of representative government. The media of print and broadcast have become even more vital to our metropolitan areas, where the great masses of our population today are concentrated.

As television has continued to grow, however, we have witnessed the demise not only of some of our largest and longest established national magazines, but also of newspapers in our biggest cities. Obviously, television has become a daily part of the plan of living for the vast majority of our children and adults.

But, I live in a city where the increasingly powerful force of television is

beamed at us from another community, a source which does not relate to our needs, our problems, and, most important, our future development.

Permit me to delineate, briefly, five important aspects of this devastating situation:

First, Akron's problem is somewhat unique in our country. Its UHF station has managed to survive for more than 8 years while blanketed by three out-of-city VHF channels. Virtually all other UHF stations in similar circumstances have long since folded.

With three Cleveland VHF stations whose transmitters bring a stronger signal to Akron, I am sure that you understand the tremendous disadvantage of our station in attempting to serve the central city of a separate metropolitan complex. For example, even though the Akron station has been very generous in providing public service time, we have found that the results from the school programs we have produced never have been commensurate with the efforts expended. The potential audience, we find, is watching Cleveland television. The Cleveland stations, of course, carry some school programs, but they acquaint the public with Cleveland's needs and problems, not Akron's. This is only illustrative of the problem faced by other Akron cultural, educational, civic, governmental, and social agencies and institutions.

Thus, the difficulty the Akron station experiences has not been due to any lack of effort or management by the station. Rather, the fact that it has survived at all, attests to the deep desire of the people of Akron to have the privilege of a local station.

Second, local television service has become increasingly important to a city. I refer to the potential force that such a station brings to the educational and civic development of the area. During the past few years, particularly while serving as the president of the American Association of School Administrators, I have visited most of our major cities in the country, as well as the large college centers. My experience would indicate that the vast services of television already are material and evident. The potential is even more miraculous than we had conceived earlier. It is inconceivable that an instrumentality of our Government would continue to deny this service to any major segment of our population.

Third, Akron is a separate cultural, civic, governmental, and academic entity. The Akron area has a 1960 population of more than half a million persons. It is the 40th largest urban center in the United States. As such it has its own economic, social, and intellectual needs and interests.

As it is, however, Akron residents daily are acquainted with developments in Cleveland—Erie View housing, University Circle renewal, urban redevelopment, and many other projects which build pride and mold respect for progress—but in Cleveland, not in Akron.

In Akron, a large segment of the public knows only what it reads in the newspapers. Unfortunately, as you know, many persons read much less than they watch and listen. Being thus denied a competitive local service, the citizenry of Akron is forced to turn to another city, where the television stations, naturally, focus their public service time on the needs of that city.

Fourth, all-channel set legislation will not solve Akron's problem. Please let me hasten to add that I do not oppose legislation which would require all television sets manufactured to be capable of receiving both VHF and UHF. It is abundantly clear that if such legislation had been in existence 10 years ago, or even 5, many of the Nation's television problems would be well on their way toward solution today. Furthermore, because of the already serious shortage of competing channels and the high mobility of our population, it is equally clear that television's future potential can be approached only if a sufficient number of sets throughout the country have this capability.

At no time in the foreseeable future, however, would all-channel receiver legislation relieve the situation of a UHF station which is covered by three nearby powerful VHF stations, yet is the only station located in its primary market. The fact that Akron already has a much larger than average saturation of UHF-equipped sets testifies of this.

As you well know, even if Congress were to pass the all-channel legislation immediately, it would take at least 7 to 10 years for the desired objective to be achieved. This is too long to ask a community to wait which has been stunted by second-class citizenship status for more than 8 years.

Finally, it is apparent that in the Akron situation, deintermixture is the only feasible solution. Proposals which have been made to transfer channels between communities sometimes have raised objections because of the loss of a potential VHF channel in an area. Actually, such action should be viewed in

terms of the gain for a community which is entirely without competitive service.

To be explicit, the loss of a VHF channel would be negligible to Erie, Pa., where there is no significant outside signal competition. In fact, it is likely that reassignment of the VHF channel from Erie actually would strengthen that market by making possible at least three competing UHF channels where now there is but one dominant VHF, a struggling UHF, and a licenced but as yet inoperative UHF. On the other hand, the gain to Akron, which for the first time could compete in a strong VHF market, would be immeasurable.

The problems of UHF tube inferiority, of more complicated UHF antenna installation, and generally less powerful UHF signal are critical only in an intermixed market where UHF must compete with more efficient and more available VHF signals. This would create no significant problem in a UHF-only area. In short, UHF is a good service, providing that it does not have to compete with VHF in the same area.

In conclusion, without the powerful medium of television at their disposal, the people of Akron have been relegated to second-class citizenship status. This forceful tool is now available for developing an intelligent and responsive citizenry to attack the complex problems of urbanization.

The blackout of this community not only is dangerous to local advancement, but, by implication, is a potential threat to national strength. The seriousness of this lack of communications facilities is very evident to one who is responsible for the adequacy of public education in Akron.

Perhaps the delay already has done irreparable damage in terms of stalled progress and creeping disunity. But I fervently hope that this committee will not wait further to study realistically the means by which the city of Akron may have the advantages of a competitive television channel.

Any action to adopt all-channel legislation without leaving provision for deintermixture in situations such as Akron's would guarantee the continuance of this unfortunate and un-American discrimination.

STATEMENT OF ROBERT E. SHUFF, CHAIRMAN OF COMMITTEE FOR AKRON TELEVISION, AKRON, OHIO

Honorable Sirs, the Committee for Akron Television, on behalf of the numerous individual citizens in the city of Akron and the tri-county area, and on behalf of the numerous civic organizations composed of the following individuals and organizations, and having a vital interest in the subject matter now before this committee, hereby submits its position on the testimony and legislation relating to all-channel receiver legislation. Such committee is composed of the following organizations and individuals:

William F. Stalker, the Stalker Advertising Agency.
Anna M. Sinclair, president, Business & Professional Women's Club,
H. W. Maxon, director of public relations, the B. F. Goodrich Co.
Harland E. Paige, president, First National Bank of Akron.
Katherine Mauthe, secretary, Tri-County Regional Planning Commission.
Robert W. Jentsch, assistant executive director, Tri-County Regional Planning Commission.
Marita Criss, administrative secretary, Tri-County Regional Planning Commission.
Robert C. Gannett, planning aid, Tri-County Regional Planning Commission.
Arthur M. Stout, associate planner, Tri-County Regional Planning Commission.
Edward Meehan, junior planner, Tri-County Regional Planning Commission.
James E. Farmer, chief planner, Tri-County Regional Planning Commission.
Walter Bobotek, executive director, Tri-County Regional Planning Commission.
Richard C. McMillin, civil engineer, Tri-County Regional Planning Commission.
Jean T. Smith, chief research analyst, Tri-County Regional Planning Commission.
Mike Benya, planning aid, Tri-County Regional Planning Commission.
David J. Roth, planning aid, Tri-County Regional Planning Commission.
Wm. W. Brady, assistant chief planner, Tri-County Regional Planning Commission.
Dianne Joseph, administrative secretary, Tri-County Regional Planning Commission.
William Bryant, associate research analyst, Tri-County Regional Planning Commission.

C. S. Miller, president, Orchard Hill, Inc. (Board member, A.D.C.)
Leslie Flaksman, executive director, Akron Jewish Center.
C. Blake McDowell, president, WADC.
Fred C. Pockrandt (retired), F. W. Albrecht Co.
M. W. Essex, superintendent, Akron Board of Education.
W. D. Sullivan (retired vice president), Babcock & Wilcox Co.
Kenneth W. Still, Area Development Committee.
Anthony Castle, Summit County Music Operators Association.
Mrs. Robert C. Early, treasurer, Mogadore Community Service Council.
Thomas J. Arconti, president, Akron Building Trades Council.
J. E. Bing, president, the Concrete Pipe Co. of Ohio, Inc.
Karl W. Wiant, president, East Barberton Civic Association.
Paul L. Jones, president, the Old Phoenix National Bank, Medina, Ohio.
H. H. Kuhn, president, the Hardware & Supply Co.
Thomas J. Arconti, business representative, Laborers Local 894.
Mrs. E. L. Baldwin, president, Akron and Summit County Federation of Women's Clubs.
Mrs. J. J. Lange, properties chairman, Akron and Summit County Federation of Women's Clubs.
Mrs. S. B. Freeman, Akron and Summit County Federation of Women's Clubs.
Mrs. Ebba Larson, Akron and Summit County Federation of Women's Clubs.
Ruth J. Larson, Akron and Summit County Federation of Women's Clubs.
Vira M. Kaylor, Akron and Summit County Federation of Women's Clubs.
George D. Martter, executive secretary, Builders Exchange.
J. H. Cooper, president, the Frank Furniture Co.
Mrs. G. A. Mahoney, first vice president, Akron and Summit County Federation of Women's Clubs.
Robert T. Hollister, president, Advertising Club of Akron, Inc.
E. J. Lehman, Akron Automobile Dealers Association.
George Frazee, president, Retail Food Clerks Union Local 698.
W. Herschel Cox, secretary-treasurer, Insurance Board of Summit County, Inc.
John D. Wadley, general secretary, YMCA of Akron.
Ray Karg, president, Summit County Gasoline Dealers Association.
Jasper M. Rowland, president, the Better Business Bureau of Akron, Inc.
Daniel A. Hester, excutive director, United Foundation of Summit County, Inc.
F. A. Freshley, president, Lake Forrest Civic Association.
Larry Sedlacek (immediate past president), Lake Forrest Civic Association.
Houston Roth, Sr., secretary, Lake Forrest Civic Association.
Jack Hustin, treasurer, Lake Forrest Civic Association.
Charles L. Dye, vice president, Lake Forrest Civic Association.
William Walker, president, the Akron Bar Association.
Jean R. Hanna, president, Hudson Business and Professional Women's Club.
John P. McDowell, superintendant, Hudson Public Schools.
Prentiss J. Drew, president, Chamber of Commerce, Hudson, Ohio.
David L. Ewart, secretary-treasurer, the Ewart-Ohlson Machine Co.
Jack Kent, president, Kenmore Board of Trade.
N. P. Auburn, president, University of Akron.
Vincent H. Johnson, president, the Akron, Canton & Youngstown Railroad Co.
Joseph H. Johnson, secretary-treasurer, the M. O'Neil Co.
E. D. Warner, president, A. Polsky Co.
Cletus V. Orr, secretary, South Akron Lions Club.
Paul H. Parminsky, director, South Akron Lions Club.
Arthur A. Rush, president, Maintenance Bureau, Inc.
Raymond L. Allard, first vice president, South Akron Lions Club.
Roy Rucker, South Akron Lions Club.
Kenneth R. Lewis, past president, South Akron Lions Club.
Daniel C. Hardwick, Akron Board of Education.
E. R. McCarty, South Akron Lions Club.
R. W. Walker, vice president, South Akron Lions Club.
Richard Cone, South Akron Lions Club.
Arthur A. Rush, president, South Akron Lions Club.
Vern F. Ripley (retired), Akron Craftsman Printing Co.
A. G. Belair, treasurer, South Akron Lions Club.
Thomas R. Rock, South Akron Lions Club.
August W. Corrall, route manager, American Bakeries Co.
Richard J. Hull, South Akron Lions Club.
Charles N. Hannaman, South Akron Lions Club.

H. T. Franklin, South Akron Lions Club.
Firman R. Opp, zone chairman, Lions of Ohio.
C. Davis, district sales manager, Western & Southern Life Insurance Co.
Merle L. Hammond.
R. B. Bailey, Bailey's Market.
Andrew Kohler, Kohler Mold & Machine Co.
Charles B. Webb, Akron Betterment Committee, Akron Chamber of Commerce.
Frank C. Montisano, Precision Watch Repair Co., Electric Shaver Service Center.
Robert W. Herberich, Herberich-Miller Agency.
James W. Brooks, Realty Exchange Co.
Ira B. Bowers, the Bowers Real Estate Co.
Rev. Francis Masin, St. Bernard's Church.
Robert L. Culbertson, attorney.
Frank Ream, Ream & Co.
Dr. Harold W. Nolf.
Kenneth Downing, Goodwill Industries.
F. C. Timberman, Allis-Chalmers.
Scott Summerville, Woodstock Typewriter Sales.
Fred E. Prescott, manager, First National Tower.
Harold Neiman, Akron District Jewelers.
Dorothy Gaylord, Akron Stenographic Service.
Albert J. Hausch, Burger Brewing Co.
John Carter, Tri-County Building Trades Health & Welfare.
Stanley Woodhead, Boy Scouts of America.
Frank Meadows, Akron Realty Board.
E. H. Russell, Eastern Central Motor Carriers Association.

The Akron area is the Nation's 40th largest urbanized area, with a 1960 population of 500,000 persons. It is an entirely separate cultural, civic, governmental, and academic entity from Cleveland, with no community of interest existing between the two cities. It has been recognized as such a separate community by all recognized authorities, including the Federal Communications Commission, in its separate radio and television allocations to both Akron and Cleveland.

Akron only has one UHF station and Cleveland has 3 VHF stations, all of the Cleveland stations giving perfect reception to the Akron area. However, because of the separation of the two areas under all factors, Cleveland stations cannot give public service time which will be appropriate to the Akron area, nor local news, weather, sports, and other programs of particular interest to the Akron area.

We wish to advise that we are in accord with the legislation now pending relating to the passage of an all-channel set requirement. However, we are strongly opposed to the placing of any rider or amendment on such legislation which would preclude the deintermixture proceedings now pending before the Federal Communications Commission. You will undoubtedly receive testimony from some groups that all-channel receiver legislation would make deintermixture unnecessary. We wish to submit that during the past 9 years, Akron residents have, without complaint, paid $50 to $100 more for their television sets than the first-class compatriots in other VHF cities. A check of local retail stores shows that most television sets purchased in Akron during the past 9 years are UHF equipped, so the lack of receivers for UHF is not the cause of the present difficulty.

It has shown in city after city that UHF stations cannot successfully compete with multiple VHF stations in the same area. It is our information that the Akron station on the UHF band has never operated at a profit and also have been advised that the Erie, Pa., station, which has only had to compete with one VHF station, has suffered considerably from a competitive standpoint during the years that they have been in existence, although they have available to them the two large network systems and must compete with only one VHF station, having the smaller of the networks available.

We feel that the committee should be advised that the economic factor is not the principal concern of the Committee for Akron Television. The committee is vitally and principally interested in equal status in a particular area and the Akron-Cleveland area is peculiar in that there is an overflow from Cleveland stations which overclouds the local UHF station as a practical matter. While such areas are close geographically, the civic unity, the educational facilities, and cultural benefits are distinctly separate in that Cleveland is one complete area and the tricounty area of Summit, Portage, and Medina is a

separate area with Akron as the hub. All of the signatory groups hereto are united as a matter of geographical convenience to the hub in Akron. Yet any placement of programing on a Cleveland station is completely ineffective to the Akron area because of the separation of these four factors. Cleveland stations cannot logically cooperate in the type of programing necessary to the members of this committee. Yet Akron, with the logical outlet, cannot compete even on public service programs for the benefit of the civic groups because of the vast advantage that VHF has over UHF where the area is not deintermixed and all stations are not on the same equal plane.

The various television stations advise us that UHF cannot compete with VHF in the same area, due to the technical performance inequalities of UHF and VHF receiving and transmitting equipment. As long as these inequalities exist, UHF can never compete side by side with VHF, even if 100 percent of the sets are UHF equipped. Complete UHF conversion alone would not be enough, in an area such as Akron, receiving three city-grade VHF signals.

The previous recommendations endorsing deintermixture made by the House and Senate committees are still 100 percent correct. We agree with the all-channel bill. However, this is far from being a solution to the UHF problem in an area such as Akron-Cleveland. In areas such as the Akron-Cleveland area deintermixture is necessary if the bill which you are proposing is to succeed in accomplishing its purpose of providing a truly nationwide television service. Opponents to deintermixture have attempted to emphasize loss of service. However, we must call to the attention of the committee that while Erie, Pa., might lose a small service by virtue of the deintermixture, the Akron area, being an area of approximately 5 times the size of such area, the gain in service to Akron would far outweigh the loss in service to Erie.

Deintermixture is vitally necessary where you have competing stations geographically situated so as to cause an overcast in reception and where the economic, civic, cultural, educational, and political factors are completely separate and distinct, despite such close proximity from a mileage standpoint.

CONCLUSION

It is therefore respectfully requested that your committee pass the all-channel legislation, but that you also reemphasize and reaffirm your committee's position on deintermixture since only by such action can Akron be assured of continued local television service and only by such method can we avoid a complete disruption of civic unity within the normal tricounty area of which Akron is the economic center.

STATEMENT OF JOHN C. LYNN, ON BEHALF OF THE AMERICAN FARM BUREAU FEDERATION

The American Farm Bureau Federation appreciates this opportunity to express the interest of its members in regard to H.R. 9267 and similar bills.

Farm Bureau is a farm-family organization, financed by membership dues on a voluntary basis. It is an independent, nongovernmental organization of farmers, by farmers, and for farmers. It was organized to provide a means whereby farmers can work together and speak with a united voice on the problems which affect them, either as farmers or citizens. There are now over 1,600,000 paid-up member families in 2,700 counties of 49 States and Puerto Rico.

At the annual meeting of the American Farm Bureau Federation in Chicago, Ill., on December 14, 1961, the official voting delegates of the member State farm bureaus adopted the following policy statements:

"Citizens on our farms and ranches no less than in our cities have an interest in the total product of radio and television. To rural people this means that broadcasters have an obligation not only to provide farm service broadcasting, but also to maintain consistently high standards in news and other programing. We commend the many radio and television stations meeting these standards, but we are disturbed at the growing numbers that are not.

"In the case of television services we are aware of the many problems facing the broadcast industry and the Federal Communications Commission. We share a general concern over the congestion of channels available for allocation on the very high frequency spectrum. At the same time, we strongly urge that neither the Commission nor Congress take action, even on a temporary basis, which would impair existing television service to rural areas."

We support in principle the objectives of legislation to require manufacturers of television sets to equip them to receive any type of television broadcast.

At the same time we wish to point out to you our concern that farm and rural families receive adequate television service.

At the present time the Federal Communications Commission has given notice of a proposed rulemaking which would deintermix eight major markets in Wisconsin, Illinois, Connecticut, Pennsylvania, New York, South Carolina, and Alabama, by withdrawing their VHF channels, and in a very real sense to deintermix—and not solve—the present problems. Such action would be contrary to the interests of many farms and rural residents.

It is our understanding that the Commission's staff has estimated that at least 51,000 families would lose their only television service if this proposal is adopted. Many of these families are farm families. In addition, countless rural families would be able to receive only a weak and unsatisfactory signal from distant VHF stations or from nearby UHF channels serving primarily urban areas.

To our knowledge, the proposal will not provide television service to any families who do not now have one or more channels available to them. While it may make available more channels for certain viewers, it seems to us that justice requires that no rural person should lose his service in order that an urban person may have an additional choice of channels.

Passage of H.R. 9267 would require the Commission to desist from its proposal to deintermix major television markets at this time.

We support passage of this bill.

STATEMENT OF HOWARD T. HEAD

My name is Howard T. Head. I am a consulting radio and television engineer, a member of the firm of A. D. Ring & Associates, Washington, D.C. For over 20 years, our firm has specialized in providing professional engineering services to radio and television broadcasters, prospective broadcasters, the major radio and television networks, and others. We have undertaken professional engineering work for a clientele numbering in the hundreds, not only in this country, but throughout the world. We have done extensive professional engineering work for Radio Free Europe, Radio Liberty, and the Voice of America.

I am appearing here today on behalf of the licensee of television station WTIC–TV, channel 3, in Hartford, Conn. I would like to summarize for you the results of extensive engineering surveys which we have made on behalf of channel 3 in Hartford, in connection with the proposals to remove channel 3 and to substitute a UHF channel.

First, let me explain why detailed engineering studies were needed. Deintermixture proposals by the Commission, and by private parties, indicated that no loss in service would result from the removal of channel 3 from Hartford. This conclusion was reached on the basis of coverage estimates which had been made using propagation curves intended to be applicable only under average conditions. Actual experience in the operation of Hartford channel 3, however, as well as my own experience in measuring actual signals in Hartford, Springfield, and similar areas, indicated that actual television service in the area would be substantially less than that estimated on the basis of calculations made using average propagation curves. This is particularly true in an area such as the Hartford area, where the terrain existing throughout much of Connecticut and Massachusetts results in actual service considerably less than that shown by calculations.

In these circumstances, where calculations using average propagation curves give results seriously at variance with actual conditions, the most reliable procedure for ascertaining the actual facts of the situation is to make studies in the field. It was concluded, therefore, that only by measuring the actual strength of the signals in the Hartford channel 3 coverage area, and by observing the actual quality of pictures received in the homes, would it be possible to make a truly accurate assessment of the impact on the viewing public of the removal of channel 3 from Hartford.

Accordingly, we planned and conducted an extensive survey, consisting of two parts, which were undertaken at the same time. First, we traveled throughout the entire Hartford channel 3 service area with field-strength-measuring equipment to measure the actual strengths of the signals delivered not only by channel 3, but by every television station, both VHF and UHF, whose signals

could be received throughout this area. Second, while these measurements of signal were being made, a trained crew visited large numbers of homes, and with the cooperation of the householders, observed actual pictures on the television screens. This crew rated the quality of the pictures, both for Hartford channel 3 and for all television stations whose pictures could be received throughout this area, and the householders were also asked to rate the quality of the pictures. The final judgment of picture quality was a composite of that provided by the trained interview team and the householders.

Literally thousands of measurements of signal strength and interviews with householders were conducted. As a result of these surveys, we were able to obtain a true picture of the television service now provided by channel 3 at Hartford, and all other stations serving the area, and to evaluate the consequences of substituting a UHF channel for channel 3 at Hartford.

In making these measurements of signal strength and conducting the interview surveys, we relied heavily on the work of TASO—the Television Allocations Study Organization—and the measuring and interview techniques which were employed were those also employed by TASO. These techniques represent the consensus of the FCC and the television industry as to the best methods for measuring the strength of television signals and determining actual picture quality provided in the home by television stations.

These field strength measurement and interview surveys confirm that the actual television service provided in this area is far less than that which would be estimated based on calculations alone. This is particularly true at UHF because the terrain and forestation conditions throughout much of this area are extremely unfavorable to propagation signals at the UHF.

To give you an idea of what we found from these measurement and interview surveys, an analysis of the results showed that in Connecticut and Massachusetts, over a quarter of a million people, in an area of over 1,500 square miles, rely on channel 3 at Hartford for their only Grade B television service. In addition, over 200,000 persons in an area of over 1,000 square miles receive grade B television service from only one other station in addition to Hartford channel 3. In contrast, the Commission's study—based on calculations alone and treating Hartford as an area of average propagation conditions—indicated that no viewers would lose all grade B television service if channel 3 were deleted from Hartford.

You may be interested to know that the findings at Hartford showed conditions almost totally different from those at Fresno. We conducted similar surveys of both VHF and UHF coverage at Fresno as part of the work of TASO. We made both field strength measurements and surveys of actual picture quality in the house, using the same techniques which we employed at Hartford. At Fresno, in contrast to Hartford, we found that actual UHF television service was, in fact, rendered to very substantial distances throughout the San Joaquin Valley, where conditions are almost ideal for optimum television coverage.

I am sure you would like to know what the significant differences are between the Hartford area and Fresno area which result in UHF coverage extending to very substantial distances at Fresno, while UHF coverage in the Hartford area is highly restricted. At Fresno, conditions are almost ideal for the propagation of UHF waves. The great bulk of the population to be served is concentrated in the San Joaquin Valley, where the terrain is very flat, where there are virtually no trees, and where high mountains exist to support very high UHF transmitting antennas. Under these conditions, UHF coverage approaches the ideal.

But conditions are very different in the Hartford area. For one thing, most of this area is characterized by rugged terrain, and the rugged terrain reduces the actual signals below the calculated values. This is true at both VHF and UHF, but the terrain reduces the UHF signals much more seriously than is true with VHF signals. Second, most of the Hartford area is heavily wooded. It is now well established that UHF signals are much more seriously obstructed by trees, even in the dead of winter, than is the case with VHF signals. At Fresno, by way of comparison, the San Joaquin Valley is virtually treeless.

Third, transmitting antenna heights at Hartford are limited both by practical and aeronautical considerations. The Hartford channel 3 transmitting antenna is approximately 900 feet above average terrain, a limitation which is established by the aeronautical authorities because of landing traffic patterns at Bradley Field, between Hartford and Springfield. Again, at Fresno, by way

of contrast, the transmitting antennas are almost 4,500 feet above the floor of the San Joaquin Valley. These factors, the rough and rugged terrain, the abundance of trees, and the unavailability of extremely high transmitting antenas, make propagation conditions in the Hartford area almost totally different from those at Fresno.

Various proposals have been made for measures intended to improve the coverage capabilities of the UHF, but even if the most optimistic predictions should be realized, UHF coverage in the Hartford area would still fall far short of VHF coverage. One of the suggested measures is the use of higher power at the UHF so as to provide radiated powers on the order of 1 million watts. This is more than four times the radiated power now employed by any UHF station in Connecticut or Massachusetts; but even if all UHF stations in this area should undertake such power increases, the area relying on Hartford channel 3 for its only grade B service would still include more than a quarter of a million people, and those relying on Hartford channel 3 for their only choice of grade B television service would still be more than 190,000 persons.

Increases in transmitted power at UHF are relatively ineffective in extending the coverage of a UHF station, even under favorable circumstances, because the curvature of the earth effectively cuts off UHF service just beyond the horizon, whereas this is not the case at VHF. In rugged and heavily wooded terrain such as exists in the Hartford area, the mountains and trees produce the same results at much closer distances to the transmitter, with the result that transmitted power increases are relatively ineffective in extending the coverage range of UHF stations. There is the further problem that UHF stations in rugged terrain frequently experience "holes" in their coverage, even at fairly close distances from the transmitter, and these power increases would do very little to alleviate the presence of these "holes" within the service area.

Another suggestion for restoring the service lost by shifting stations from VHF to UHF channels has been the use of so-called translators, boosters, and satellites. This problem is considerably more difficult than it sounds on the surface, because the areas to be served are large, irregular in shape, and located so that the topography restricts the coverage which can be provided by any single booster, translator, or satellite. In the case of Hartford channel 3, we estimated that something on the order of 36 translators or booster stations, even operating under ideal circumstances, would be needed to restore the coverage which would be lost by substituting a UHF channel for channel 3 at Hartford. Actually, the conditions are far from ideal and this estimate is undoubtedly a substantial understatement of the actual requirements.

It has also been suggested that the use of community antenna receiving systems might be employed to restore some of the loss in service. Although community antenna systems are now enjoying widespread use to provide service to towns and other centers of population, they ordinarily leave the surrounding, less densely populated rural area completely unserved. Furthermore, even a community antenna system requires that there be a signal available from a broadcast station for redistribution, and the broadcast signal will be lost in those areas where the coverage of the broadcast station is cut back.

To summarize, studies based on calculations using average propagation curves were found to be unreliable in the Hartford area, and it was found necessary to make extensive measurements of signal sterngths and large numbers of home interviews to determine the actual television service in the Hartford area. Over a quarter of a million persons would lose their only grade B television service, and an additional 200,000 persons would lose their only choice of grade B service. There are no practical means now available or foreseen for replacing the television service which would be sacrificed by the loss of channel 3 at Hartford.

STATEMENT OF MORT FARR, CHAIRMAN OF THE BOARD OF NATIONAL APPLIANCE & RADIO-TV DEALERS ASSOCIATION

My name is Mort Farr, an appliance and television retailer from Upper Darby, Pa. I have been associated with the radio and television industry since 1920. I have been a pioneer in the amateur radio field, having been issued amateur call letters 3-ME, and an operator's license signed by Mr. Hoover, then a Director of the Department of Commerce in 1920.

I appear here today as chairman of the board, and chairman of legislative Committee of NARDA. Through my association with this organization, as a director since 1946, and as president in 1950–51, and chairman of the board continuously since that time, I am in constant contact with retailers throughout the United States.

We are here to lend support to the enactment of bill H.R. 8031 and its principles as proposed by Mr. Newton Minow.

There are many reasons why our organization supports this bill.

(1) A radio, if purchased in 1920 and still operative, would be capable of receiving all frequencies currently in use in the United States. Television is the only mass communication service whereby all frequencies assigned to that service cannot be received on all sets. An individual pays 90 percent of the cost of what would constitute a complete set, and that set is only capable of receiving one-sventh of all available channels.

In color TV for example, the consumer is really paying 95 percent of this cost and for less than 5 percent additional, they could purchase a receiver which cannot become obsolete.

If it becomes mandatory to include all-channel selectors in the manufacture of all television sets, it would therefore encourage the building of more TV stations to better serve markets that have either no or too few broadcasting stations.

(2) A much wider selection of programs would become available to the viewing public. This would create much keener competition between networks and stations which would tend to improve the quality of the programs. It would also bring network programing to areas not being currently serviced.

(3) The greatest single factor in all-channel television, would be in the field of educational TV. This could probably be the greatest single force in furthering education since the invention of the printing press.

It is interesting to note that the Educational TV Assocation has indicated that as many as 1,000 of the approximately 1,800 additional channels available, will be required for educational purposes.

It is true that a small percentage of our current TV programs are devoted to education. However, the scheduling of these shows at inconvenient hours and not available in many areas reduces greatly the benefits that could be gained.

(4) There is no doubt as to the need for all-channel receivers. We have already established the additional cost is insignificant for the extra services possible. Having gone through the early problems incurred when UHF was first introduced after the "freeze" and recognizing the tremendous advances both in transmission and receiving of these channels there should be no reason why in most locations the quality of the picture should not be as good on channels 14–84 as they are now on channels 2–13.

(5) I have no doubt, that had a ruling such as this bill proposes been enforced in 1952 when there were less than 7 million television receivers on the market, the position of the television industry would be in a more advanced state today.

The bill, as proposed will not obsolete present sets. The viewers can be sure of getting the channel they now receive and the most they might have to do, if additional stations open up in their area, is to add a converter.

As a representative of an industry which has been paying a 10-percent excise tax on television sets manufactured, I have gone to Washington on many occasions to try to have this unfair tax removed. While it was imposed as a temporary measure, it is renewed each year with a promise that at some further time relief will be granted. Perhaps this might be a good time to propose that all sets being manufactured that include all-channel tuners will either not be taxed or perhaps taxed at 5 percent.

This will be especially beneficial to stimulate the sale of color television sets as it will make the price of all-channel color sets no higher than the VHF models.

I believe that the stimulation that the sales of color television would receive could conceivably result in little loss to the Revenue Department, as a color television set sells for at least twice as much as a black and white model.

I want to thank the committee for giving me the opportunity of presenting our views relative to the inclusion of the all-channel selector on all television sets manufactured, and would now like to give the gentlemen on the committee a chance to ask any questions that they might desire.

STATEMENT OF GEORGE R. TOWNSEND

Gentlemen, my name is George R. Townsend and I am a consulting engineer specializing in UHF television. During the past 9 years I have devoted my entire time to the design, installation, operation, and maintenance of UHF television transmission and receiving systems. Much of this experience has been gained as engineering director for the Springfield Television Broadcasting Corp. of Springfield, Mass., which has established UHF as a workable medium in the varied terrain of western New England. I have served extensively with every panel of the Television Allocations Study Organization, the TASO of which you have possibly heard. I am currently engaged in the redesign of the WWLP UHF transmission facilities in Springfield which will ultimately result in the creation of the highest powered commercial television station in the world.

I come before this committee because I have been retained as engineering consultant by the Committee for Competitive Television and also have worked for private broadcasters in the Hartford and Erie deintermixture proceedings, and as such have produced findings which have particular bearing on some of what you have been told.

First, let us look at the Hartford problem. I understand that witnesses have appeared here and repeated a gross misstatement broadcast over all of Connecticut that 260,000 people will lose their only television service if Hartford is deintermixed. To my knowledge no one here has yet offered to divulge the source of this terrifying figure. That number was apparently obtained from a survey taken by the engineering firm of the Association of Maximum Service Telecasters, an organization with which I guess you are familiar, and conducted for the Travelers Insurance Co., one of the financial giants of the world, which operates the VHF station in Hartford. Those who have appeared before this committee to cite that figure obviously have made no effort to investigate or fully interpret the results of the Travelers survey.

In my reply comments to be filed with the Commission on June 22, I will make a report of the inherent shortcomings manifest in this survey which when fully analyzed appear to indicate this survey was handpicked to meet a particular requirement. I could go into detail here and describe how the Travelers methods of measurement were not made according to the TASO technique as claimed by Travelers, of how vast sections of the so-called white areas were never even measured at all, and of how even the interpretation of results by the Travelers legal counsel differ from the interpretation by the engineering consultants. However, it is not my intent to burden you with technical information you should not be trying to understand. The proper place for such argument is before the expert group you have established for this purpose which represent the only unbiased and competent body of experts in this field. Such argument is not proper or intellectually honest before other groups when only part of the story is presented or as in the case of this committee, where you cannot be expected to comprehend the intricate details involved.

Finally, to dispel any doubt you may have as to the extent to which the 260,000 people will be deprived of service, I will cite some figures and facts compiled in a survey which has been conducted in the so-called white areas by Napolitan Associates, a public relations and research firm of national standing. This organization was employed for the purpose of determining the acceptance of existing television reception in the homes of those so-called white areas. Information available to me at this time indicates that:

1. In the so-called white areas only 5½ percent of the viewers say they can watch only one channel.

2. Out of the 5½ percent, 85 percent say they can watch only channel 3, the VHF channel.

3. Of the 85 percent, of the 5½ percent, 77 percent bought their first television set prior to 1957, the latter part of which year channel 3 was activated.

4. Again, of the 85 percent of the 5½ percent, or about 4½ percent of the total homes, 23 percent said they do in fact watch "The Untouchables," a program not carried by channel 3, and 29 percent said they do in fact watch "The Price Is Right," a program only available in this area on a UHF channel. There is more data not yet available on this general subject which is even more demolishing, but already we are obviously down to an insignificant percentage of the people

living in this vast and muchly advertised white area. It is further revealing to find that some viewers who said they could only view one channel said that the channel in question was one of the UHF stations operating in this area. This report in its entirety will be available shortly and will be submitted to the FCC in the reply comments to be filed on June 22. Our only conclusion is that the so-called white area is very appropriately labeled, inasmuch as it is really a mirage.

Let me now investigate the true situation in Erie, Pa. The VHF operator in that city would have us believe that vast areas surrounding Erie will lose all television service upon deintermixture. Nothing has been introduced up to this point to demonstrate that the UHF operator in Erie, encouraged by the deintermixture proposal, has sought to extend his service with a second UHF station operating as a satellite in Oil City, Pa. That station, together with applied-for automatic-repeater stations in Franklin and Titusville, Pa., will, for the first time deliver city grade television signals to those cities, with a quality of service never to be achieved as long as the VHF station remains in its position of monopoly of the bulk of the income in this area.

The VHF station does not deliver even usable signals into those communities as witnessed by the fact that cable operations exist in those cities, all of which find it appropriate to carry the Erie VHF on their systems. The coverage of the proposed UHF stations not only will serve to provide television service not now provided by the VHF station, but it will also extend into an area east of Oil City, where there is now no service at all. It is my understanding that this committee is seriously concerned with protecting the public from loss of television service. Since more and better television service will obviously result from deintermixture, the committee must certainly look favorably upon this idea.

Much more could be said here as further explanation of the Erie case, but again, elaborate discussion becomes highly technical, and qualified FCC engineers and economists are employed for such evaluation.

In conclusion, I have shown in a nontechnical sense, that the two areas I have analyzed in detail can be realistically deintermixed without the creation of so-called white areas. Since I have not given the same attention to the other areas proposed for deintermixture by the Commission, I am not prepared to comment further, but it is obvious that the two markets I have studied were wisely chosen by the Commission.

STATEMENT OF MERRITT MILLIGAN ON BEHALF OF STATION WMTV, MADISON, WIS.

MARCH 7, 1962.

Congressman OREN HARRIS,
House Office Building, Washington, D.C.:

Your committee has heard direct testimony relating to deintermixture in the Madison, Wis., market presenting only one side of the picture. WMTV, channel 15, Madison, put into use on October 25, 1961, the tallest UHF tower in the Nation, using a new type custom-built RCA antenna. All information regarding this area presented by the vested VHF interests is based on material gathered prior to this significant improvement. We believe that equal time should be made available so that the modern UHF story can be presented to the committee to offset the VHF pressure tactics now being applied. Please advise the amount of time available Friday for an appearance before your committee and the number of copies of text needed. If time for an appearance Friday is absolutely not available, we urgently request that the committee record show our request and that we be permitted to immediately file a brief which will be made part of said record.

MERRITT MILLIGAN, *General Manager.*

GENTLEMEN: During the past several days, this committee has listened to many witnesses, both those with years of experience in communications and those who are self-styled experts or are simply parroting words placed at their disposal by individuals interested only in protecting and perpetuating a virtual stranglehold on commercial television in individual markets.

It was our understanding that this committee was to hear testimony regarding all-channel set legislation, but this legislation has become a mere vehicle on which vested VHF television interests hope to ride roughshod over the majority of the Federal Communications Commission at the very time when these seven gentlemen have finally come to grips with the most serious problem facing the communications industry today.

Every member of the Federal Communications Commission should be praised (regardless of individual viewpoint) for unceasing efforts, and their, if you will pardon the expression "intestinal fortitude" in bringing forth a solution to the allocations problem realiizng that in so doing they would be subjected to a campaign of public and political pressure of the magnitude seldom seen in the halls of Congress.

Television channels, as are all radio frequencies, are a limited natural national resource—and must be allocated with great care, and by those who are highly skilled in the art of communications. If this committee, without first having spent months, if not years, of study on the assignment of radio frequencies, proposes and recommends passage of legislation dealing in any manner with the allocation of television channels, you have, with your own hands, created a Frankenstein monster which could eventually destroy the Federal Communications Commission. The instant it becomes apparent that the studied opinion of a majority of the FCC can be thwarted successfully by pressure upon this committee, you will be confronted by a succession of groups seeking preferred frequency allocations, and using exactly the same tactics being thrust upon you gentlemen this week. Tactics which I shall clarify in detail later.

You will, in a matter of 5 days, either confirm the FCC in its established right to allocate radio frequencies, or confirm this comittee, and its successors, as the authority on such matters.

It is right and proper that the proposed all-channel set legislation be discussed before this committee. Proper witnesses are obviously the FCC, the manufacturers of television sets, spokesmen for the consumer-public who may be affected by prices, and by counsel regarding the legality of such proposed legislation. The appearance and testimony of any broadcaster or any party associated with the broadcast industry should be disallowed if any mention of frequency allocations creeps in. Broadcasters and their associates have appeared because of the specter of channel reallocation and deintermixture, and in return for their support of this legislation, ask this committee to overrule the studied opinion of communication experts and the FCC majority in order that they, the VHF broadcasters, may continue to enjoy the fruits of their present competitive-free position in many markets.

At this point I wish to state that in concluding this testmony, I will set forth specific proposals which I sincerely believe will satisfy a great majority of those people who have expressed their views here this week, but I will first set the base for this proposal by discussing in detail facts relating to statements made in this room.

The attempt to usurp the FCC's right to make frequency allocations has come from two directions.

(1) The eight general areas where the Commission has proposed an immediate deintermixture action; and

(2) Other VHF television station operators and allied organizations not immediately associated with deintermixture, but attempting at this time to forestall any future attempts by the Commission to change channel assignments to UHF.

In regard to those who fall into group 2, I simply do not propose to waste the committee's time in a tilt with a windmill. There is no indication in the Commission action that these areas are in any danger, and I intend to prove to the committee that with the passage of several years, these very people will be scrambling to move into the UHF spectrum to improve their coverage.

Now, as to point 1, I will confine my remarks to the Midwest generally, and to Madison, Wis., in particular. As briefly as possible the history of the market is that two UHF stations began operation in the summer of 1953 on channels 27 and 33. VHF channel 3 was assigned but was not in actual use until the summer of 1956 after the Commission ruled on a comparative hearing between several applicants. It should be noted that the University of Wisconsin at Madison operates an educational station on channel 21, but my remarks will be confined entirely to the commercial assignments.

Deintermixture in the Madison market was rejected twice in 1957 by a 4-to-3 majority. Three of the four Commissioners who voted to reject deintermixture were Messrs. Doerfer, Mack, and McConnaughey and they are no longer members of the Commission. Commissioner Hyde, dissenting from the Commission's report and order, at that time stated that refusal to deintermix Madison was "obviously inconsistent with the action taken in similar cases of the same date (Elmira, Evansville, Fresno, Peoria, Springfield, and Schenectady)."

In the interest of time, much can be summed up in this editorial published by the Wisconsin State Journal on Friday, September 22, 1961:

"[From Wisconsin State Journal, Sept. 22, 1962]

"GO ALL UHF AND SAVE THREE CHANNELS

"Owners of TV sets in the Madison area may be inclined to regard the current dispute over the prospect of all-UHF television service here as simply an economic struggle among the owners of the television stations.

"Instead, the Federal Communications Commission (FCC) proposal is a matter of vital concern to televiewers who want to receive (or continue to receive) the programs available on all three major networks.

"The FCC has proposed a rule which would deintermix the Madison market. The single VHF now available—channel 3—would be converted to the UHF band.

"The FCC has sound reasons for the move. The two local UHF stations can't continue to compete with a VHF channel. Last year the two UHF stations sustained a loss of almost $73,000. Meanwhile, channel 3, with its VHF advantage, had a gross profit of more than $500,000.

"The channel 3 owners can be excused for attempting to preserve this competitive advantage. Everyone likes to make a buck. However, the economic interests of the channel 3 operators are not those of the Madison area viewers.

"The question which faces the TV public is not one of saving channel 3—it is a question of saving three channels.

"If Madison is converted to an all-UHF market, three TV stations can compete on an equal basis. All three can survive, and area viewers will have a choice of three networks. If the present situation is continued, however, Madison will inevitably become a one-station, one-network market.

"The problem is critical not only for those who live in Madison or the immediate area, but for many who now receive channel 3.

"Given a reasonable competitive situation, both of the local UHF stations plan increased tower heights and power to enable them to reach roughly the same areas now reached only by channel 3. And channel 3 itself, with its present tower and added power and converted to the UHF band, can serve an area greater than that now described by the FCC as its grade B coverage area.

"It comes down to this:

"Those in outlying areas who have been convinced that they will lose channel 3 (synonymous to them with losing TV service entirely) will not lose anything under the FCC proposal. Rather, they will gain two new stations which they cannot now receive and have a choice of the programing on all three networks.

"The channel 3 owners have conducted a vigorous campaign urging viewers to write their Congressmen and the FCC to 'save channel 3.' Madison area viewers who are inclined to write a letter or two would do better to urge support of the FCC rule—and save three channels."

Now another facet of UHF. I challenge any engineering representative in this room to dispute this statement. Given equal tower height, maximum legal radiated power, modern UHF transmitting equipment and a UHF receiver tuner built to today's techniques and not those of 1951—under these conditions a UHF station will outdistance, outcover and outperform any VHF station.

You ask, if this is true, then why deintermix? Because early UHF equipment was truly experimental. In fact, we have a 1952 version transmitting antenna (which was in use until late last fall) on the ground now. I will gladly give it to any one—it's only value is scrap. And yet many UHF stations are still using this type simply because they can't afford the investment in a new model. We used to go through $6,000 tubes in the transmitter every 3 months. Now due to extra equipment and competent engineering, our present set of final tubes are in their third year of operation and going strong. New transmitter designs now indicate that fantastic amounts of power can be generated at a fraction of the cost that existed several years ago. Radiated powers of 5 million watts will be nothing for UHF, and because of the number of UHF channels available, separation can be established to easily take advantage of this superpower without interference between stations.

You have a classic example right here in Washington of why UHF has nearly died in infancy. Your educational UHF station just on the air recently using the fatal combination of low tower, low power, and the resulting poor coverage, when people either can't receive it or get a poor picture, they naturally assume

that UHF is no good. Every VHF operator and those associated with VHF naturally fan this flame. The same attitude permeates the national advertising agencies for the most part—an area where much of our revenue must come from if we are to survive. In the few UHF-only markets (deintermixed) an advertiser does not have the choice and now buys on a strictly competitive basis between UHF stations, thus giving revenue for expansion.

Let us now take a close look at what happened in Madison late last summer following the Commission proposal to deintermix. The VHF station promptly started using its own facilities to fight the ruling with a drumfire "Save Channel 3," "Preserve Channel 3" etc., campaign and by issuing a pamphlet telling how everyone within 125 miles of Madison would lose this valuable service which they claimed was prepared in consultation with their lawyers and engineering consultants. The VHF station proceeded to set up booths at area fairs and community gatherings, with their air personalities present to solicit the signing of petitions to "Save Channel 3." These people were misled to believe that channel 3 would go off the air, not that they would be assigned to channel 33 which was to become available late in October of 1961. Quite naturally, it was easy to get thousands to sign petitions. By mid-September, WMTV filed a complaint with the FCC and the channel 3 operation stopped direct use of their own facilities, but by then the ball was rolling down the hill. Congressman Thompson had joined what apparently was a popular cause, but at no time did he bother to brief himself on technical improvements being rushed to completion by my station, WMTV, or to the overall coverage picture as it could easily exist. Our legal advisers flatly refused to allow us to make contacts ourselves because they felt that this was a matter before the Commission itself and any attempt to bring about political pressure was a highly questionable and dangerous practice.

WISCONSIN LEGISLATURE,
SENATE CHAMBER,
Madison, January 19, 1962.

Re deintermixture of channel 3, Madison, Wis.

Hon. NEWTON MINOW,
Chairman, Federal Communications Commission,
Washington, D.C.

DEAR SIR: I am writing to you because during the past session of the Wisconsin Legislature, a resolution (copy attached) was passed specifically calling on the Federal Communications Commission to sustain the position taken by channel 3 here in Madison resisting the deintermixture proposal. As a State senator representing the entire city of Madison, I was especially interested in this matter and wish to call at least three matters to your attention.

First of all, I know that there have been numerous petitions and other communications to the Commission supporting the position of channel 3 to the effect that they are in opposition to an order that would eliminate channel 3. These communications are all based on the fundamental misunderstanding that channel 3 is to be discontinued and not merely changed to a UHF channel. My impression of all of these reports and of the debate in connection with the subject resolution is that everybody unquestionably was considering that the Federal Communications Commission was about to discontinue channel 3 altogether rather than changing it over to a UHF classification. I think that this is a very fundamental misunderstanding which has permeated the entire public reaction on the matter.

The second thing that I want to mention is the actual wording of the resolution which refers to the fact that channel 3 has a viewing radius of 120 miles from Madison. Of course, this isn't right because this would mean literally that channel 3 could now be seen in Milwaukee and in points east in Lake Michigan and also 120 miles north and south of Madison. None of these situations prevail and, as a matter of fact, I don't actually know that any sets 120 miles away even to the west are able to see the channel 3 station although they have a signal that is seen further in that direction than in any other.

My third point is that I think I am speaking for the voters who live in Madison who want to be sure that they will continue to have a chance to see programs sponsored by all three networks. I know that you have this in mind in your deliberations on this important question and my understanding is that if channel 3 is changed over to a UHF classification this fundamental objective will not be jeopardized.

I am writing to you because I have a very genuine concern for the opportunity here for viewing of television programs and I have been concerned over the fundamental misunderstanding that I think exists in this community. I have been impressed by the logic of the deintermixture program and by the basic justice of applying it in this situation.

Very truly yours,

HORACE W. WILKIE,
Senator, 26th District.

Now if you think the general picture I have just outlined in the Madison area could create misunderstanding and confusion, this was nothing compared to the activity in other markets. Full page newspaper ads, theater trailers, luncheons and dinners for community leaders always presenting the theme "Don't let them take this away" thus creating a "loss" image in the mind of the public. Mr. Chairman, I tell you that if a conservative Republican were to use these techniques and spend this kind of money in your district, and you were financially and legally unable to answer, you would be the victim of a landslide vote.

It is true that in some of the markets selected by the Commission for deintermixture, the existing UHF facilities had slipped so far due to continued losses, that UHF does not have a good image. This leaves a fertile field for the VHF protests to grow in, and it is quite possible that the FCC set its sights on too broad a field. This point I will cover in my recommendations.

On October 25, 1961 (after petitions were signed and the "loss" of VHF service was firmly planted in people's minds) my station, WMTV, placed into service on channel 15 a tower 1,109 feet in height, 1,169 feet above average terrain, using an entirely new type of transmitting antenna built to tight specifications to insure proper null-fill and correct beam-tilt. This is the tallest UHF tower currently in use in the Nation, but small compared to some VHF towers. Our radiated power is 240,000 watts, which is only 4.8 percent of our permitted maximum of 5 million watts. Again, facing continued loss of revenue, we do not have funds available to move to higher power. However, our tower, antenna and transmission line are set to go to 1 million watts the instant the market economics permit. Remember, all the following coverage data, represents service with only 4.8 percent of the maximum power for UHF. Both the Madison channel 3 station and WMTV, channel 15, the station I manage, had their respective engineering consultants do extensive signal surveys. The channel 3 study (which of course covered channel 15 as well) is now on file with the Commission, and our own engineering filing will be made shortly. Both studies show conclusively that UHF has exceeded Commission predictions. Frankly, we are still a few miles short of VHF predicted class B contour, but when using the Commission's criterion for "interference free class B contours" (which is a necessity on the crowded VHF band, our present UHF "interference free class B contour" already surpasses that of the VHF station, and we are using only 4.8 percent of our maximum allowable power, while the VHF station is at the allowable maximum.

Now that the potential for UHF coverage with only 4.8 percent of the total permissible radiated power for UHF, I believe you will agree that new light has been placed on the subject.

With the new techniques now available for an enterprising receiver manufacturer to take advantage of and with breakthroughs coming on ultra-high power transmitters, there is nothing to be afraid of on UHF with its vast number of available channels across the country.

I would seriously recommend to this committee, which in turn might well want to recommend to the Commission, some of the following points:

(1) That the Commission "tighten-up" its criteria for the deintermixture of a market to avoid immediate deintermixture of a market where existing UHF facilities are of such caliber as to have created an extremely poor image of UHF. (However, some clear definitions should be set forth.)

(2) That such criteria clearly require a heavy conversion to UHF be in existence, and establish some minimum number of people who might be left with no service. However, the requirements for measuring such an area be clearly and concisely defined so as to leave no room for argument. (The requirement that a heavy conversion to UHF be in existence, would automatically exclude most existing VHF markets for many years until sets covered by the "all-channel" type of legislation come into existence in large numbers.)

(3) That once such criteria be established, that they be published, and as soon as any market qualifies, that it be deintermixed.

(4) That any existing VHF channel left vacant by such deintermixture in a market be immediately assigned for educational use in that community. (This would apply certainly for channel 3 in Madison, 13 in Rockford and 3 in Champaign. This would guarantee an excellent use of the facility, and allow an educational institution to get reasonable service at minimum cost because of the readily admitted advantage of VHF when relative low power and low tower height are an economic consideration.)

(5) That this committee confirm that radio frequency allocations is a function of the FCC, and that pleadings before this committee by private interests on this matter will not be allowed. (The FCC should certainly consult with this committee privately at all times, and keep the members fully informed. However, public hearings of this type, where allocations come in, create the problem, particularly with television where there obviously can be great public stirring and undue pressure generated to unduly influence the due process of Government.)

I am aware that I am but one small voice, but I sincerely believe that within the general area of these proposals does lie a reasonable and equitable solution which will result in a maxmium benefit with a minimum of dislocation to the American viewing public.

The CHAIRMAN. This concludes the hearings. The Chair would like to say that the record will be held open for 5 legislative days for anyone who desires to file his statement, and any additional information in addition to the testimony already given.

We hope to have the record printed just as soon as we can in order that the committee may take this up at an early date.

The Chair wants to thank all of the witnesses who have appeared, and especially he wants to thank the members of the committee for their patience and cooperation.

The committee will adjourn.

(The following material was submitted for the record:)

HOUSE OF REPRESENTATIVES,
Washington, D.C., March 12, 1962.

Re Hearings on allocation of VHF and UHF channels.

Hon. OREN HARRIS,
Chairman, Interstate and Foreign Commerce Committee,
House, of Representatives.

DEAR MR. CHAIRMAN: I appreciate very much the opportunity to make available to your committee the views of a large number of my constituents concerning the proper utilization of the frequency now being used by VHF channel 3 in Hartford, Conn.

Your committee has heard a number of witnesss speak of the serious deprivation which would be felt by residents of the States of Connecticut and Massachusetts. This by no means paints the entire picture, however, as the removal of this channel from commercial television would cut in half the television entertainment available to one of the fastest growing areas in the United States of America, i.e., Suffolk County, Long Island, N.Y.

My congressional district situated on the east end of Long Island has grown from a population of 350,000 in 1950 to almost 1 million today. We who live on the east end of Long Island are much closer across the Long Island Sound to Hartford, Conn., than we are to New York City; and, in fact, on the east end of Long Island the New York City television stations simply cannot be received. The two television stations which presently serve this area are channel 8 in New Haven and channel 3 in Hartford. When I was running for Congress in the year 1960 the only television broadcasts which I made were from Connecticut television stations—simply because they have the best coverage.

To remove channel 3 as a commercial station will mean that the easterly 75-mile area of one of the fastest growing sections in the country will automatically be reduced to reliance for commercial television on a single station. I do hope that this is not permitted to happen, and I assure you that hundreds of thousands of residents in my district will be most grateful if this does not come to pass.

With best personal wishes,
Cordially,

OTIS G. PIKE.

HOUSE OF REPRESENTATIVES,
Washington, D.C., March 16, 1962.

HON. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: I regret deeply that, because of my absence from Washington, I was unable to appear before your committee in connection with the hearings held last week on H.R. 8031, H.R. 9267, and similar bills relating to the UHF–VHF channel allocation problem. Had I been there, I would have appeared before you with Congressman Sullivan, whose views on this legislation are substantially the same as mine. Accordingly, I would appreciate it if the views set forth in this letter would be made part of the record of your hearings.

From what I have heard about the matter, I have no reason to question your own bill, H.R. 8031, or that portion of H.R. 9267 which would authorize the FCC to require all sets to be shipped in interstate commerce after a reasonable cutoff date to be capable of receiving UHF as well as VHF stations. However, I do desire to question those provisions of H.R. 9267 and similar bills purporting to restrict the authority of the Commission to exercise its allocation authority by prohibiting it from deleting "the assignment of any television frequency between 54 megacycles and 216 megacycles (very high frequency channels) made to any community on or prior to September 1, 1961, for the purpose of having all commercial and educational television stations in that community operate on frequencies outside the frequency band between 54 megacycles and 216 megacycles (very high frequency)."

Upon the information which has been presented to me, my objections are twofold:

First, this language, though designed to meet the problems of the eight communities as to which existing VHF stations have been the subject of deintermixture proceedings begun on August 15, 1961 (namely, Champaign, Rockford, Madison, Hartford, Erie, Binghamton, Columbia, S.C., and Montgomery) is broad enough conceivably to be applicable to the Springfield, Ill.-St. Louis-Terre Haute proceedings which, in one form or another, have been pending since July of 1956, and therefore to post the chance that operation of St. Louis channel 2 might be terminated without the Federal Communications Commission being permitted to conclude the proceedings on this matter pending before it.

Any such result seems unwarranted. The eight deintermixture proceedings (dockets 14229 through 14246) which were the occasion for these bills involve proposals to delete VHF channels on which there presently are existing services in the respective communities. In such case, there are considerations of vested rights of the station operators and the viewing public which might justify "freezing" the status quo, even though, as explained below, I consider this type of legislation objectionable on principle.

But, as to the Springfield-St. Louis problem, this justification does not appear to exist. I am informed that there has never been a station operating in Springfield on channel 2, while to the contrary, a station has been operating on channel 2 in St. Louis since April of 1957, and is presently giving the community a service of very high quality. It would seem that to apply the freeze provisions of H.R. 9267 to the Springfield-St. Louis situation would not be preserving the status quo by maintaining an existing service anywhere but rather destroying the status quo by the peremptory disruption of existing service in St. Louis.

Second, and more basically, it does not seem advisable that legislation be enacted during the course of an administrative proceeding to change the law then applicable to the proceedings under consideration. This, it seems to me, undermines sound and fair procedure. The legislature should lay down principles of law and policy criteria applicable generally, and the administrative agency should have the role of applying these principles and criteria to individual cases. The legislature should not intervene in individual cases to create special results.

In conclusion, I am of the view that the proposed legislation be adopted in the form set forth in your own bill (H.R. 8031); that if any restriction be enacted prohibiting deletion of VHF channels that this be restricted to channels on which there is already an operating station; and that, in any case, the pending deintermixture proceedings now before the Commission in the Springfield-St. Louis case (docket No. 14267) be allowed to proceed for decision by the agency

to whom Congress has heretofore conferred jurisdiction, subject to review in the court as provided by existing law.

Sincerely,

THOMAS B. CURTIS.

[TELEGRAM]

MONTGOMERY, ALA., *March 2, 1962.*

Hon. OREN HARRIS, M.C.,
Chairman, Subcommittee on Communication,
House Office Building, Washington, D.C.:

We request your earnest consideration of the provisions of H.R. 9267 relating to the present geographic allocation of VHF television channels. We quote from the resolutions of the Alabama Farm Bureau Federation: "We strongly feel that all rural areas of our State should have service from at least one reliable VHF television station. We also oppose any effort by FCC to require TV manufacturers to include UHF frequencies on all sets manufactured." The proposal of the Federal Communications Commission to move 8 of these channels would downgrade or destroy television service to thousands of Alabama rural families. We oppose the mandatory inclusion of all-channel tuners in all television sets.

J. D. HAYS,
President, Alabama Farm Bureau Federation.

Before the Federal Communications Commission, Washington, D.C.

Docket No. 14229

IN THE MATTER OF FOSTERING EXPANDED USE OF UHF TELEVISION CHANNELS

REPORT ON EFFECTS OF DEINTERMIXTURE IN PEORIA, SPRINGFIELD AND RELATED MARKETS IN ILLINOIS

(Prepared by Dallas W. Smythe, Dallas W. Smythe & Associates, for the national Committee for Competitive Television)

At the request of the Committee for Competitive Television, we undertook to analyze the facts bearing on the results of the Commission's decisions affecting deintermixture in the Peoria, Springfield, and related markets in central Illinois. While the report was requested by the Committee for Competitive Television, it was in no way supervised or directed by that committee. Indeed in the course of preparing this analysis we have not been informed of the nature of the arguments or facts which will appear in the comments of the parties to the present proceeding. Nor have results of this analysis in draft, or otherwise, been seen by members or officers of the committee. Our purpose has been to present the facts as fairly as possible. If in doing so we appear to operate on the assumption that basically competition is preferable to monopoly in the American system of broadcasting, we hasten to state that this is indeed our working assumption. That it is shared by the Commission transforms the monopolists' charge of "bias" into a desirable basis of principle in public policy which permeates the Communications Act of 1934, as amended.

Introduction

In the long and tangled history of TV allocation policy in the United States, the deintermixture issue has provided much controversy. While this issue is nationwide in its ramifications, it may be that a case history of one area where deintermixture has been fought over will shed light generally on the principles involved in the issue. Central Illinois is taken as a quasi-laboratory situation in which most, if not all, of the contentions and facts which pertain to this issue may be found. In central Illinois, the Federal Communications Commission ordered deintermixture in Peoria in 1957. This was a community with two operating UHF stations and an allocated but unauthorized station assignment for a VHF station. In central Illinois, the Federal Communications Commission ordered deintermixture in Springfield in 1957. This was a community with one operating UHF station and one allocated but unauthorized station assignment for a VHF station. It differed from Peoria in that a VHF station in another

community laid down an acceptable quality signal in it, and offered strong competition to the Springfield UHF station. In central Illinois, the Federal Communications Commission refused to order rulemaking looking toward possible deintermixture in Champaign in 1958. This was a community which housed the VHF station which dominated TV service in Springfield and dozens of counties in Illinois and Indiana. There was then no UHF station on the air in Champaign.

Since 1957 and 1958 some years have elapsed. Television sets have been introduced in more homes. Conversion of TV sets to receive UHF has changed. UHF stations have increased in number in central Illinonis. UHF stations have increased their power and antennna heights and widened their coverage areas. Television markets have changed. Network affiliations have shifted as between UHF stations and as between UHF and VHF stations. A record of time sales to networks, to national and regional advertisers, and to local advertisers has been accumulated. Broadcast revenues, expenses, and income have changed patterns. There is evidently material here for an examination of how the expectations in the minds of the men who comprised the Federal Communications Commission in 1957 and 1958 for intermixture and deintermixture have panned out in reality. This study attempts to evaluate how those expectations corresponded to reality as the latter unfolded over the years in central Illinois. Perhaps it may illuminate analogous situations elsewhere.

It is refreshing to note that the Commission in the *Bakersfield Deintermixture* case (21 RR 1549, 1555, 1556–1961) now accepts competent market research evidence of TV coverage, such as that provided by the Nielsen Coverage Survey and the American Research Bureau, Inc., surveys of set conversions. For too long UHF stations have been whip-sawed by being judged by computed grade A and B service contours (which discriminate in favor of VHF coverage and against UHF coverage) in proceedings before the Commission while at the same time VHF stations use Nielsen and ARB surveys to establish the scope of their service areas in the market where time is bought and sold.

Extensive use is made here of the Nielsen Coverage Service No. 2, spring, 1956, and of the Nielsen Coverage Service NCS 1961 Television, spring, 1961, measurement. We have used the "weekly coverage" figures, expressed as percentages of TV receiver homes in the respective counties in Illinois and Indiana where our research took us. In the analysis which follows we have employed various cutoff levels of coverage below which station coverage may be disregarded. Some times, where we were concerned to measure the widest possible (i.e., extensive) coverage, wa have employed no cutoff level. In such cases, the minimum coverage reported (10 percent or above) has been taken into account. Other times where we were concerned to measure the most intensive coverage, we employed a cut-off level as high as 75 percent. A survey of advertising agencies informed us that in the markets where TV time is bought and sold the merchantable level of coverage depends on a number of factors, including, inter alia, the identity of the network with which the station is affiliated, the nature of the (adjacent) programs, the ratings which specific programs enjoy, the considerations of time of day when programs or advertisements desired by a particular purchaser of time might be available, the marketing strategies of particular advertisers, the market structure of the industries in which advertisers live and work, the price asked by the station, et cetera. A consensus seems to be that a minimum coverage which is fairly applicable to most stations most of the time would range from a high of about 50 percent to a low of about 25 percent. Below 25 percent advertisers are now impressed with coverage claims.

For our purposes we have chosen to employ a cutoff of 38 percent (selected as midway between the high and low estimates given us by advertising agencies) for a single, general purpose tool. This we call salable coverage in what follows. An illustration may be helpful: According to the 1961 Nielsen Coverage Service, Menard County, Ill., was one in which the following percentages of TV receiver homes tuned into the following stations from one to seven times a week:

WCIA	25	WMBD	86
WICS	77	WTVH	77
WEEK	57	WTVP	34

A cutoff of 38 percent drops from the particular analysis for which it is used stations WCIA (25), and WTVP (34). To the extent that network identity enters into advertisers' interests in purchasing time, what is the effect of this cutoff? An advertiser interested in CBS has WMBD available to him for it is

a CBS station. One interested in NBC has WICS and WEEK available to him. One interested in ABC has WTVH available to him. All networks are thus represented at levels of 77 or higher. In this county, WCIA and WTVP are clearly not important stations.

Occasionally in our analysis we have distinguished between dominant and nondominant stations in the coverage of counties. This distinction has always been made with a rule of thumb which requires a 10-percentage-point margin between the dominant and the nondominant station. This margin has been employed because of the desirability of protecting against making distinctions based in reality on sampling variance.

In passing now to the actual analysis of the reality situation in which the Commission's expectations have been tested, it is convenient to take this opportunity to state that in the Peoria and Springfield deintermixture cases in 1957 the Commission set forth the criteria for considering the merits of proposals to eliminate a VHF channel in markets with one or more commercial UHF channels as depending in large part on such factors as—

(*a*) Whether significant numbers of people would lack service as a result of the elimination of the VHF channel.

(*b*) Whether one or more UHF stations are operating in the area.

(*c*) Whether a reasonably high proportion of the sets in use can receive UHF signals.

(*d*) Whether the terrain is reasonably favorable for UHF coverage.

(*e*) Whether, taking into account all the local circumstances, the elimination of a VHF channel would be consistent with the objective of improving the opportunities for effective competition among a greater number of stations.

These criteria are common to all of the deintermixture cases and will not be separately stated in the three sections which follow:

IV. Summary

Competition, service, and efficient use of TV (or any other broadcast) channels are a tightly linked triad. Services to the public results from competition among as many stations as possible, using available channels. Efficient use of channels is regulated by the presence or absence of an equitable basis of competition among stations, and the degree to which they offer programing serviceable to the public.

The Commission has provided the third element in the triad in abundance: available channels. Networks and other producers of program material (local as well as commercial production centers) have production resources which are far from used to capacity. Entrepreneurs are available and interested in entering the operation of TV stations—under conditions of equitable competition. The Commission has recognized that the intermixture of VHF and UHF channels usually produces an inequitable basis of competition. Intermixture, therefore, stands suspect of injuring service and efficient use of TV channels.

If one element of the triad is artificially restricted; e.g., equitable competition among stations, the other two elements are injured. The result is inefficient use of channels and loss of service by the public. If, per contra, a whole or partial step is taken to create conditions which permit equitable competition among stations, the other two elements are improved: program service is increased and improved, and utilization of TV channels is increased.

This analysis of the history of TV in central Illinois as it bears on the results of Federal Communications Commission orders in 1957 and 1958 concerning deintermixture in this area leads to a series of related conclusions. The first concerns an action where a relatively sharp advance was made toward deintermixture. The second concerns an action where conditions mitigated the effects of a similar attempt toward deintermixture. And the third concerns an action where intermixture was supported by the Commission.

(1) The Peoria deintermixture order was given at a time when two UHF stations had been on the air in that city for some years. UHF set conversions were already near universal in a hard core of counties where UHF weekly coverage was very high and indeed the exclusive form of TV for a majority of viewers. In this context the denial of a possible VHF station by the Commission confirmed an existing trend. As a result of deintermixture, both of the original two UHF stations increased their facilities and the service areas. A third UHF station was built. A fourth station—a satellite of one of the first three—went into operation to extend UHF coverage in La Salle County. As a consequence the

salable coverage area of 4 Peoria-area stations in 1961 covered 13 counties (as against 11 in 1956) and 51 percent more TV homes than in 1956.

The unique characteristic (within central Illinois, at least) of the salable coverage area of the Peoria UHF stations is its monolithic nature. In the 11-county hard-core market in 1961, Peoria UHF stations are the only stations which have reportable coverage for 55 percent of the TV homes, and they are the only stations with salable coverage in 72 percent of TV homes. External VHF signals are used, to be sure, at the margins of this core of UHF users. But stability and steady growth of UHF seem to distinguish the Peoria situation.

In terms of service rendered, the outstanding features are the expansion of salable coverage spatially, and the increasing diversity of program fare available to the area. The addition of the third UHF station increased the network services available by one-half.

Financially, the Peoria UHF stations have fared better than UHF stations outside of central Illinois. The average broadcast income of the Peoria UHF stations in 1960 was 20 times the average for the UHF stations outside the central Illinois area. There is impressive evidence that the division of business among the three Peoria UHF stations is on an equitable basis: it seems to reflect management ability primarily and not the fortuitous circumstances of having a particular class of station.

But while the UHF stations in Peoria have been surviving and growing slowly, they have not been what might be termed "thriving." The median of the three stations had an operating ratio of 97 percent in 1960 (i.e., 97 cents out of every revenue dollar went to pay expenses). And it is estimated that the average for the three stations was a broadcast income equal to 8 percent of the depreciated investment in tangible broadcast property in the same year.

It seems clear that the handicap which holds back the growth of the Peoria UHF stations is the presence of inequitable competition from the lone commercial VHF station licensed in central Illinois at Champaign. For they must meet its unequal competition for audiences and for network and spot advertising revenues in the counties where both it and they have salable coverage. In 1961 there were three such counties and they contained 21 percent of the TV homes in the Peoria salable coverage area.

The conclusion with respect to the Peoria deintermixture is that within the area the Commission's expectation that deintermixture would produce a fair competitive field has been supported by reality. But if, as happened in the denial of deintermixture in Champaign in 1958, the area deintermixed in Peoria is to be hemmed in by a VHF wall on the east (as well as on the west by the VHF wall of Rock Island and Quincy), deintermixture cannot release the full potential of UHF for competitive growth. In terms of our triad, the Peoria experience suggests that the improvement in the competitive factor as a result of deintermixture did improve the performance of the service factor and did improve channel utilization. But the improvement in the competitive factor was insufficient.

(2) The Springfield deintermixture order might seem on casual inspection to have affected a similar situation: there was a single UHF station already on the air in Springfield with a high proportion of set conversions in its coverage area. The potential VHF station was removed from Springfield. Thus far, the situation sounds like that of Peoria. But in reality there was a crucial difference between them. This difference lay in the fact that in 1956 the Springfield hard core service area was very small as compared with that of Peoria (1 county with 31,720 TV homes as against 9 counties with 95,750 TV homes) and the fact that the Springfield station had salable coverage in not a single county where it was free of the salable coverage of the Champaign VHF station, WCIA. By contrast in 1956, Peoria stations had two counties with no reported coverage (at any level) for anything but UHF stations. These counties contained 74,360 TV homes. And they had a third county with no salable coverage by WCIA, with 11,400 TV homes. This means that while Peoria UHF stations could grow within a definable UHF-only market, the Springfield UHF station had to combat VHF competition at its doorstep.

Nevertheless, the effect of deintermixture on UHF in the city of Springfield was to stimulate WICS to increase its power and height; it increased its grade B area by 600 percent. Its salable coverage area increased by 1961 from 5 to 12 counties with an increase in TV homes of 160 percent. Its hard core coverage rose from one to seven counties with an increase in TV homes of 231 percent. The Springfield station has, however, not been able to fight free of VHF

domination. In 1961, 88 percent of the TV homes in the WICS salable coverage area also received salable coverage from WCIA. In another 10 percent of WICS's TV homes, Quincy VHF stations had salable coverage. In only 1 county (Menard, with 2,420 TV homes) was WICS free of salable coverage by VHF stations; and there it encountered salable coverage from 3 Peoria UHF stations.

In addition to increasing its facilities in Springfield, WICS built and operates a UHF station, WCHU, in Champaign, as a consequence of the Springfield deintermixture. Operating in the shadow of WCIA, this UHF station nevertheless in 1961 had a salable coverage of 55 percent in Champaign County—the limit of its salable coverage area.

In some respects, it is misleading to regard Springfield as a single UHF station market. For the coverage areas of WICS, Springfield, and of WTVP, Decatur, are closely overlaid. With present facilities each station delivers a grade A signal to its rival's home city. In 1961, WTVP had salable coverage in 88 percent of the TV homes in the WICS salable coverage area, and WICS had salable coverage in 91 percent of the TV homes in the WTVP salable coverage area. The Decatur UHF station, WTVP, is completely blanketed in its service area by salable coverage from WCIA, and always has been. It has applied for permission to enlarge its facilities in Decatur, and it began (in 1961) to operate a translator station W70AF on channel 70 in Champaign. As yet, this station has no demonstrable salable coverage.

By this intimately overlapped chain of UHF station markets one moves from Springfield on the west to Danville, Ill., on the east. There the UHF station, WICD, has salable coverage limited to its home county, Vermilion. It has not increased its facilities since deintermixture in the Springfield area. Like the Champaign, and Decatur UHF stations, Danville's salable coverage area is entirely duplicated by that of WCIA. So, too, was that of WBLN, Bloomington, Ill., which went off the air after the 1957 deintermixture orders.

One may sum up the service history of the UHF stations in the "Springfield area" (as the Commission defined it in 1957) in such terms as these. The Springfield UHF station increased its facilities and its salable coverage area very substantially as a result of deintermixture. The Decatur UHF station increased its salable coverage area by 54 percent (in TV homes) between 1956 and 1961 and has applied for increased power. Each of them started stations in Champaign. The Springfield UHF station was able to become an affiliate of NBC with a normal affiliation contract (instead of the 90-day contract it had had while deintermixture was under consideration). The Decatur station acquired a normal affiliation relation with ABC (instead of having to take only such network programs as WCIA rejected).

The economic evidence supports the service evidence of growth by the UHF stations in the Springfield area. WICS more than doubled its network time sales, 1956–60, and doubled its national and regional spot time sales. WTVP has fallen just a little short of doubling both its network and national and regional spot time sales. Local time sales increased by 18 and 63 percent, respectively.

Like the Peoria UHF stations, those in Springfield and Decatur appear to be earning substantially more income than UHF stations outside of central Illinois. Also, like the Peoria UHF stations, those in Springfield and Decatur appear to be on an equitable competitive basis as between themselves.

As with the Peoria stations, those in the Springfield area appear to be operating on small margins of economic safety. Thus, the operating ratios of the four UHF stations in Springfield, Decatur, Champaign, and Danville ranged in 1960 from a low of 83 percent to a high of 166 percent. This means that operating expenses took from 83 to 166 cents for every dollar of revenue. And the most profitable of these UHF stations earned a return of $122,000 broadcast income in 1960, or about 35 percent on its depreciated investment in tangible broadcast property. This was the highest income in 5 years of profitable operation and followed 4 years in which substantial losses had been sustained. The other UHF stations in the area did not produce nearly as favorable a showing.

In the Springfield area, as in Peoria, the UHF stations are barely surviving and growing slowly. For them the reason is even easier to see. The pervasive and inequitable competition provided by WCIA skims the cream from the market and leaves them the skim milk. The monopolistic magic of being a VHF station permits WCIA to claim coverage and command rates which network and national spot advertisers are willing to pay for the privilege of using its facilities.

The conclusion with respect to Springfield deintermixture is that the denial of a VHF channel to Springfield undoubtedly saved the Springfield and Decatur stations from extinction by assuring them that they would not have to compete with two VHF services at their doorsteps. But while it preserved their existence, it did not and could not relieve them of the inequitable basis of competing throughout their service areas with a VHF station. In terms of our triad, the Springfield experience was that the improvement in the competitive factor was less than in Peoria because of the erosive effect of VHF penetration from within central Illinois. The improvement which resulted in the performance of the service factor and the channel utilization factor is a tribute to the potency of even a partial step toward deintermixture.

(3) In 1958, the Commission refused to consider deintermixture of WCIA, channel 3, Champaign, and the substitution of a UHF channel for this station. Nevertheless, the momentum given UHF in central Illinois by the Peoria and Springfield deintermixture orders has sharpened the case for deintermixture of WCIA in the intervening years.

Champaign-Urbana and the immediately adjacent area have become more of a UHF community. In 1958, there were no UHF stations there. UHF set conversion in Champaign County was 39 percent. Champaign County was solely within the salable coverage area of WCIA; no UHF station had salable coverage in it. In 1961, there were one full-fledged UHF station and one UHF translator station in operation. UHF set conversion in the county had risen to 65 percent or higher. The UHF station WCHU had salable coverage of the county. Instead of having a selection of all three networks' programs plus syndicated film from the VHF station, three full network program services were broadcast in the county (although the limited coverage of the translator station means that not all of the county receives the full ABC network service). And Champaign County advertisers, now that local time sales have become competitive, are able to afford to advertise on UHF as they had not been on VHF.

But intermixture or deintermixture of channel 3 involves a broader area than Champaign County. The broad salable coverage area of WCIA shrank in scope between 1956 and 1961. Fifteen counties with 27 percent of the salable coverage of TV homes in 1956 were lost to it by 1961. In the later year, they were exclusively given salable coverage by external VHF and UHF signals as well as UHF signals from within central Illinois. In the 27 counties within the WCIA salable coverage area in 1961, central Illinois UHF stations had salable coverage and no external VHF signals had salable coverage of 62 percent of the TV homes (as against 43 percent in the same counties in 1956). Inside the 1961 WCIA salable coverage area, the percentage of TV homes which receive salable coverage from external VHF stations and for which no UHF stations had salable coverage was 23 percent in 1961 (as against 25 percent in 1956).

If one regards the 1956 salable coverage area of WCIA in relation to UHF coverage of it (ignoring external VHF coverage), one finds that 48 percent of the TV homes in WCIA's salable coverage area in 1956 were also receiving salable coverage from central Illinois UHF stations. Five years later, central Illinois UHF stations had salable coverage of 76 percent of WCIA's salable coverage area.

Not only has UHF salable coverage penetrated WCIA's salable coverage area heavily since 1956, but the penetration has provided multiple UHF service over widening areas. Thus, whereas only 5 percent of the TV homes in the central Illinois UHF salable coverage area in 1956 received three or more salable UHF coverages, by 1961 the corresponding figure was 41 percent.

Walled in on the west, north, and southwest by multiple external VHF signals, the expansion of UHF service has been mostly eastward. And as figures 1, 2, and 3 make plain, there is now an "island" of UHF which extends from Fulton, Cass, and Morgan counties on the west to Vermilion County on the Indiana line on the east; from LaSalle County on the north to Shelby County on the south.

If channel 3, Champaign, were converted to UHF it is probable that its salable coverage in Illinois would remain substantially unchanged. The effect would be to extend the UHF-only salable coverage area from 6 counties and 109,600 TV homes to 19 counties with 297,980 TV homes—an increase of 172 percent. The effect would be to increase from 41 to 60 percent the proportion of the UHF salable coverage area which would receive three or more UHF salable coverages. The effect would be to extend UHF service to the 24 percent of WCIA's salable coverage area which presently is outside the UHF salable coverage area.

What have the past 5 years done to the problem of set conversion and the related problem of the "white areas" which might be created by substituting a UHF channel for channel 3? First, as to set conversions: In 1961, 76 percent of the TV homes in WCIA's salable coverage were in counties which received salable coverage from UHF stations in central Illinois. In those counties, 86 percent of the TV sets were converted by 1960. Twenty percent (over and above the 76 percent) of the TV homes in WCIA's salable coverage area in 1961 were in counties which received two or more external VHF salable coverages. An additional 2 percent had available one external VHF salable coverage. Conversion would not be indispensable in order to receive TV service for this 22 percent of WCIA's salable coverage area which presently lies outside the heavily converted UHF salable coverage area. The sole possible problem area is one county (Ford) with less than 5,000 TV homes which, because of its peculiar shape, appears to be outside both the UHF salable coverage area and the external VHF coverage areas. Overall, 68 percent of the TV homes in the WCIA salable coverage area in 1961 had been converted by 1960.

Our detailed examination of the "white area" problem confirms the results of the set conversion information. The alleged white areas based on theoretical signal contours shrink drastically when they are compared with measured signal contours. And they vanish when compared with salable coverage. The apparent problem of Ford County is resolved when one takes account of the fact that the bulk of the population in the county is located in the southern portion, well within the UHF salable coverage potential of WCIA, and of the complementary fact that the minority of the county's population which is scattered in the northerly panhandle must be presumed to prefer to view Chicago VHF stations as do the viewers in the adjacent counties, equidistant from that city.

The inequitable basis for competition which exists when, as in central Illinois, a solitary VHF station occupies a commanding position in relation to UHF stations appears dramatically when one considers the financial aspects of the market. In 1960, the VHF station received 35 percent of the $5,697,000 of broadcast revenues[1] received by all central Illinois TV stations. Seven other stations (UHF) divided the remaining 65 percent, and none of them received more than 15 percent. When one determines the total broadcast income[1] of the stations in this area which had any such income, it develops that the VHF station retained 78 percent of it; the most profitable UHF station retained 11 percent. And three of the seven UHF stations reported deficits.

Between 1958 and 1960, UHF had made progress financially. For, while total broadcast revenues for central Illinois TV were 14 percent higher in the later year, UHF broadcast revenues were 25 percent higher and VHF broadcast revenues 4 percent lower. In the earlier year, the monopolistic effects of intermixture were even more evident than in the later. For in 1958, the VHF station reecived 41 percent of total broadcast revenues in central Illinois, and retained 88 percent of the broadcast income of stations which earned such income.

When measures related to the profitablity of individual stations are examined, the presumption of inequitable competition is reinforced. The VHF station had an operating ratio[2] of 43 percent in 1958 and 57 percent in 1960. The most fortunate UHF station had an operating ratio of 85 percent in 1958 and of 83 percent in 1960. The percentage which broadcast income bears to depreciated investment in tangible broadcast property is the measure of the rate of return on investment. The VHF station appears to have had a return of 308 percent on its investment in 1958 and of 219 percent in 1960. By contrast the most profitable UHF station had a return of 35 percent in 1960.

Such financial results do not flow from conditions of equitable competition. They flow from the monopoly position conferred on the VHF station. They are the measure of the inadequacy of the actions to improve the competitive factor in the triad which have thus far been undertaken by the Commission in central Illinois. They are the measure of the effects of the Commission's decision not to move to deintermix channel 3 in 1958. These effects the Peoria and Springfield deintermixture orders could not counteract, favorable to the extension of competition as they were.

It is clear that deintermixture has resulted in more extensive and efficient use of UHF channels assigned to central Illinois. Four UHF stations have expanded

[1] Broadcast revenues minus broadcast expenses equal broadcast income (or profit) before Federal income tax.

[2] The operating ratio is the percentage of revenues which is spent in conducting the business; the complement to it is the percentage of profit to revenues.

their facilities since 1957. And four other UHF stations have gone on the air. Two applications for new UHF stations are pending.[8] Additional outlets have been created for full network schedules and for local programing, as well as for local advertisers at rates they can afford to pay. The needs of particular local communities have begun to be met by differentiated stations. The Commission's belief that multiple UHF stations could compete effectively has been vindicated as far as the limiting condition placed by it on such competition permit. Public benefit has resulted from the expansion of facilities and the activation of once-idle UHF channels. More services are available to larger populations than would have been the case had there been no deintermixture. The economic dominance exerted by the sole VHF station in central Illinois is clear from the financial data. If and when this inequitable element in the competitive situation is removed, the restriction on one element in the triad—equitable competition—will be removed, and the positive effects of equitable competition will generate still further improvements in service and in the efficiency of channel utilization.

Peoria UHF stations—a testimonial to the potential of UHF.

DALLAS W. SMYTHE & ASSOCIATES,
DALLAS W. SMYTHE.

URBANA, ILL., *January 4, 1962.*

COLUMBIA BROADCASTING SYSTEM, INC.,
New York, N.Y., March 15, 1962.

HON. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: I have had occasion to read the transcript of the testimony of William L. Putnam, chairman of the Committee for Competitive Television, before your committee. At pages 406–407 of the transcript, Mr. Putnam refers to what he terms the "extreme flexibility" some people have shown in their testimony. Mr. Putnam cites my position before your committee as one of his examples.

I should greatly appreciate your including this letter (which sets the record straight on the items mentioned by Mr. Putnam in connection with my testimony) in the record of the proceedings before your committee on H.R. 8031, H.R. 9267, and others, and H.R. 9349.

At page 406, Mr. Putnam notes that I oppose deintermixture. He then comments: "Now, of course, if I had 7 affiliates in the 10 areas presently being thought about for deintermixture, maybe I would adopt that position." Aside from being confused as to the numbers involved (there are only 5 VHF affiliates of the CBS television network in the 10 areas to which he apparently refers), Mr. Putnam asserts, in effect, that my opposition to deintermixture stems from selfish desire to protect our network interests. In making this unfounded implication, he chooses to ignore the fact that in five of the markets to each of which is in competition with a VHF station. He also chooses to ignore the fact that CBS has long opposed deintermixture where it would require the removal of an operating VHF station with a consequent adverse effect upon existing service to the public. His suggestion as to my motive for opposing deintermixture is wholly unwarranted.

At page 407, he quotes what I had said earlier:

"We are persuaded that the events since the lifting of the freeze confirm the correctness of our view, expressed in 1950–52, that the UHF portion of the spectrum should not be used in such a way as to require it to compete with the VHF portion of the spectrum in the same markets."

He identifies this as a "direct quote" from my testimony before the Senate. He continues: "Now, when he gets over here and talks to you people I guess he says something different." Mr. Putnam has pulled the "direct quote" out of context from testimony I gave before the Senate Subcommittee on Communications, as I will show hereafter. Furthermore, he attempts to buttress his "flexibility" characterization by omitting the date of the "direct quote" and with knowledge that the members of your committee may well have known that I testified before the Senate Subcommittee on Communications only a few weeks ago on the same matters as I testified to before your committee. The fact is the "direct quote" is from testimony I gave in June 1954.

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[8] Both of them were filed by the owner of WCIA who also has bought one of the three

As to the "direct quote":

Prior to the issuance of the sixth report and order in 1952, CBS had opposed the intermixture of VHF and UHF stations in the same market. Other interested parties supported intermixture and the Commission, in the sixth report and order, did intermix the UHF and the VHF channels. Two years following the issuance of that report and order, I testified before the Senate Subcommittee on Communications with respect to the problems relating to the status and development of the UHF channels. A number of suggestions had been made at that time respecting the allocations problems; one of them was the elimination of intermixture of the UHF and VHF assignments. At the outset of my discussion of the intermixture problem I stated what Mr. Putnam has quoted at page 407 of the transcript. I went on to state, however:

"But a lot of water has gone over the dam since the lifting of the freeze. The problem no longer is whether the policy of intermixture should or should not be adopted. The fact is that it has been adopted, and the present allocations are based on it. Thus we are faced with the far more troublesome and vexing problem whether, having gone this far in intermixing, it is now, at this date, desirable or practicable to try to force the milk back into the bottle through the process of what I shall call deintermixture."

I stated that deintermixture had some very important advantages and that it also had some very serious disadvantages. I said:

"But the process of disentangling is never easy; I cannot minimize the seriousness of the problems which would be involved. Some set owners, as I have said, would lose service altogether. Several million would lose service unless they converted their set. This is hard on them; they bought their receivers assuming that it would provide them a regular service. Deintermixture would frustrate their expectations—in some cases altogether, in more cases unless they spend money to convert their receivers."

I then suggested certain criteria that might be adopted to determine whether the price of deintermixture would be so great that the purchase of its advantages would become extravagantly foolish. I suggested that the exploration of the feasibility of one or more deintermixture plans should be undertaken immediately.

"Perhaps it will be found that the price is too great, and that whatever the benefits of deintermixture, the time has passed and it is no longer possible. But it should be explored, with an open mind and with intensive effort at once."

With the passage of time we became convinced that the price of deintermixture—loss of service—was too great. Since 1955, when we presented two plans to the Commission (referred to in my testimony before your committee), we have opposed deintermixture in a market where a VHF station is on the air. In testimony before the Senate Committee on Interstate and Foreign Commerce (March 1956), a CBS witness opposed either selective or widespread deintermixture. In comments filed with the Federal Communications Commission in February 1962 (docket No. 14229), we opposed the proposals for deintermixture. In my testimony before the Senate Subcommittee on Communications in February 1962, I opposed deintermixture. In my testimony before your committee last week I opposed deintermixture.

Our position with respect to deintermixture has not experienced the "flexibility" which Mr. Putnam has sought to ascribe to it.

Sincerely,

FRANK STANTON.

CHAMBER OF COMMERCE OF GREATER PHILADELPHIA,
Philadelphia, Pa., February 14, 1962.

FEDERAL COMMUNICATIONS COMMISSION,
New Post Office Building, Washington, D.C.

GENTLEMEN: Your Commission's proposal to switch existing VHF television stations to UHF channels would cost the American public millions of dollars by making their present VHF receivers obsolete and worthless without the installation of conversion units.

In Greater Philadelphia, alone, some 2 million television receiver owners could be adversely affected if your Commission's proposal was effectuated. The conversion units would cost $35 to $50 each and would not, in any way apparent to us, increase the variety or quality of service available to television receiver owners.

As a matter of fact, evidence indicates that substitution of UHF channels for VHF channels would, in many instances, actually cut the quality of reception and the number of programs that would be heard in a given area.

Further, because of the fact that UHF signals have an effective average range of only 35 miles as compared to VHF's range of 60 miles, shifting of VHF stations to UHF channels would automatically deprive those in outlying or sparsely settled areas of one or more of the television services presently available to them.

In some instances, particularly in hilly areas, evidence indicates that all television service would cease if and when the proposed mandatory switchover takes place.

This would naturally follow because of the economic inability of many small communities to support a television broadcasting enterprise capable of providing high quality or even minimal acceptable programing and transmission.

Studies show that nearly 7 million people will lose television service in just the first 8 markets proposed by the Commission for the initial changeover.

That loss would not only inconvenience the individuals directly affected and deny to them entertainment and cultural and educational programs they are presently enjoying but would seriously cut into the Nation's economy and threaten thousands of jobs by denying the seven million viewers the stimulus to buy products advertised on television.

It is also obvious that the Commission's proposals pose a threat to the millions of dollars invested by the broadcasting industry in VHF equipment.

Still another reason militating against the proposal is that institution of a nationwide UHF system would add greatly to the cost of advertising products—because of the inability of UHF channels to reach the great numbers of people presently serviced by VHF stations.

An advertiser would have to purchase time on a great many more stations in order to get his message to the millions he now reaches through existing outlets.

The added costs would ultimately be borne by the consumer.

Also vigorously opposed are suggestions that Congress enact legislation requiring manufacturers to install both VHF and UHF receiver capabilities in all television sets produced in the future.

Action of this kind would set a dangerous precedent striking right at the heart of this Nation's competitive economic system—a precedent that would pave the way for the Federal Government to tell all manufacturers what they must produce without regard to marketability of the product.

A requirement that all television sets be equipped with dual receiving components would be the same as compelling the automobile industry to install both automatic and standard transmissions in all cars.

Quite apart from the principle involved, it is obvious that the added costs would be borne by the ultimate purchaser—and the economy damaged if prospective purchasers decided the item was priced beyond their means or desires.

UHF television channels should be allowed to develop side by side with existing VHF as technical and economic conditions warrant and permit—rather than through the forced measures proposed by the Federal Communications Commission.

Over and beyond all the arguments against changing from VHF to UHF television broadcasting is the fact that, at the request of the Federal Communications Commission, Congress appropriated $2 million in 1960 for a study of UHF's technical performance. That study is scheduled for completion at the end of this year.

Certainly, the least the Commission can do in justice to all concerned, including itself, is wait until that study is completed and results evaluated before coming to any specific conclusions on the feasibility and desirability of widespread use of UHF television channels.

The issue is so important that a congressional hearing is urged if the Commission persists in its proposal.

The position outlined above is that of the Chamber of Commerce of Greater Philadelphia which represents the business community of the Philadelphia standard metropolitan area.

The position was developed by this chamber's special television task force and concurred in my the chamber's governing committee.

Sincerely,

ROBERT G. WILDER,
Chairman, Special Television Task Force, Civic Affairs Council.

CORINTHIAN BROADCASTING CORP.,
New York, N.Y., March 15, 1962.

HON. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: Corinthian Broadcasting Corp. operates five television stations located in Indianapolis and Fort Wayne, Ind.; Tulsa, Okla.; Houston, Tex.; and Sacramento, Calif. Four of these television stations are VHF and one is UHF. We respectfully request that this letter be included in the record as a statement of the views of Corinthian Broadcasting Corp. with respect to H.R. 8031, H.R. 9267, and other related bills before the committee.

We support the passage of legislation which would require that all television sets shipped in interstate commerce be equipped to receive all 12 VHF and 70 UHF channels and, at the same time, would preclude the FCC from requiring existing VHF stations to shift to the UHF.

In our judgment, such legislation would provide the best approach to basic television allocations policy. It has two essential and complementary purposes: to bring about circulation of all-channel sets and to assure that present VHF service will be maintained. Passage of this legislation will go a long way toward making possible additional television service, without tearing down existing service.

Others appearing before this committee have explored the legal, economic, and technological facets of the problem. No useful purpose would be served by detailed repetition of these matters here. We shall, therefore, emphasize several specific points which we believe are important.

First, the following points are central with regard to the all-channel set requirement:

1. We are opposed to governmental invasion of the private economy in the absence of compelling necessity. We are therefore reluctant as a matter of public policy to see this requirement imposed by law on set manufacturers. Nevertheless, we feel that such legislation is justifiable because of its intimate relationship to television allocation policy, which is legitimately within the province of the Federal Government.

2. Mandatory all-channel receiver requirement is not necessary for the maintenance of UHF at its present level. It is, however, important for its orderly expansion and it seems to be the best available means for achieving that end.

3. All-channel receivers will mean over a period of time more television stations and perhaps additional television networks, but the size of the increase will depend on the number of additional stations each particular market can support. This number, in our judgment, is more limited than generally supposed.

4. An increase in the number of television stations may result in more signals being available to more people. But we must not lose sight of the fact that there are already multiple signals available to the great majority of television homes. A recent report by the A. C. Nielsen Co. showed that the average home in the United States has service from 4.4 television stations available to it. Interestingly enough, the same study indicates that the average home uses only 2.8 of these services.

Second, we believe that the following points need emphasis with regard to the restriction on the Commission's power to delete VHF stations in favor of UHF:

1. There is a "clear and present danger" that deletions of VHF will be made in a significant number of cases. Already eight stations in eight markets have been proposed for changeover, and the FCC has stated that this is only the beginning. There is reason to believe that the number will increase once the initial group has been deleted. Little comfort can be taken from the fact that a majority of the present FCC states that it is not proposing an all-UHF system at the present time. The temporary nature of the position is highlighted by the FCC's proposal that all VHF stations be encouraged to apply for UHF channels for the purposes of simultaneous operation. The only reasonable basis for such a proposal is an eventual shift to UHF.

2. A move to an all-UHF system would lessen, rather than increase, the television service available to the American people. Total service television requires utilization of both UHF and VHF. Neither one will do the job alone. UHF television, because of its inherent technical characteristics, is limited service television. Within its limitations UHF can provide good service. It does so in Fort Wayne, where Corinthian operates a UHF station and has done so for almost

6 years. But an all-UHF system would provide far less television service for the American people than VHF and UHF together.

3. Legislation such as that we support would bring about general circulation of all-channel sets, promoting the orderly expansion of UHF television. And it would forestall the use of general circulation of all-channel sets as a device or excuse for shifting VHF to UHF, turning our total service system into a limited service system.

Sincerely,

C. WREDE PETERSMEYER, *President.*

THE GREATER ERIE CHAMBER OF COMMERCE,
R.W. & S. DIVISION,
March 5, 1962.

MR. ARTHUR INGRAM,
General Manager, WICU–TV, Erie, Pa.

DEAR MR. INGRAM: At the board of directors meeting of the Retail, Wholesale, and Service Division of the Greater Erie Chamber of Commerce on March 1, 1962, the subject of the Federal Communication Commission's proposal to convert WICU, channel 12, to a UHF channel was discussed at length.

The board made a motion they would be against a change, at this time, for the following reasons:

1. Due to our central location from larger cities if the VHF channel No. 12 is removed at this time there are many towns and communities in the tristate area that would be virtually without TV coverage.

2. The merchants of the Erie area depend on this extended coverage for sales promotion. It is felt a decline in overall sales would certainly follow.

3. If channel No. 12 is discontinued this change would make it necessary for many people to convert their present TV set to receive a UHF signal. In some cases this is impractical and would necessitate the purchase of a new TV set causing undue hardships.

4. The change and lack of coverage in the tristate area could affect our vacation and tourist business which is is vital to our overall economy.

For these reasons the board feels it is in the best interest of the merchants and Erie that channel No. 12 remain at this time so that you can continue broadcasting without lessening overall coverage and effect.

Sincerely,

ROBERT P. SALCHLI,
President, Board of Directors.

MOTOROLA COMMUNICATIONS & ELECTRONICS, INC.,
March 8, 1962.

HON. J. ARTHUR YOUNGER,
The House of Representatives,
Washington, D.C.

DEAR SIR: Manufacturers offer two kinds of television sets for sale: (1) Sets which will receive only VHF broadcasts, and (2) sets which will receive both VHF and UHF broadcasts. The purpose of this letter is to voice our opposition to S. 2109 and H.R. 8031 which would give the Federal Communications Commission authority to prohibit the shipment in interstate commerce of television sets which will receive only VHF broadcasts .

Motorola is opposed to this legislation because an all-channel TV set, which will receive both VHF and UHF broadcasts, costs the consumer about $30 more than the VHF only set. This price increase will have an adverse effect on the sale of TV sets.

Today UHF broadcasts are not available in most areas of the country. There is no assurance that UHF broadcasts will be available after the consumers are forced by law to buy all-channel TV sets. Thus, if S. 2109 and H.R. 8031 become law, each person who buys a TV set in the future may be compelled to pay $30 additional for an all-channel set even though UHF programs may never be broadcast in his area. Also, most TV-set owners will have to install a new antenna at a cost of $29 to $60 in order to receive UHF broadcasts.

At the present time the Federal Communications Commission has underway a $2 million engineering investigation in New York City of technical problems

related to UHF signal characteristics. Until the results of this investigation are known it is too early to force consumers to buy sets to receive both VHF and UHF broadcasts.

For these reasons we hope you will oppose S. 2109 and H.R. 8031.

Sincerely yours,

MOTOROLA COMMUNICATIONS & ELECTRONICS, INC.,
DONALD F. BRINKLEY,
Vice President and Western Area Manager.

AMERICAN BROADCASTING CO.,
New York, N.Y., March 6, 1962.

HON. OREN HARRIS,
Chairman, Interstate and Foreign Commerce Committee, House of Representatives, Washington, D.C.

DEAR MR. CHAIRMAN: As you know, I am now vice president in charge of news for the American Broadcasting Co. In this capacity, I hope you will not mind my writing to you on behalf of ABC to set forth my company's position on important television legislation now pending before your Committee on Interstate and Foreign Commerce. I am doing so because selective deintermixture is extremely important to further expansion of news coverage for ABC.

Robert L. Coe, vice president in charge of station relations for ABC–TV, will testify before you on these matters, but, if I may, I would like briefly to outline ABC's beliefs:

ABC supports H.R. 8031 although we are suggesting that it include an unduly broad statement of the needed legislative authority to require all television receivers shipped in interstate commerce be equipped for all-channel reception.

ABC opposes the other bills and resolutions which include prohibitions against the FCC proceeding with selective deintermixture because we believe that the selective deintermixture of the eight specified markets is vital to the expansion of U.S. television service to the public.

In our opinion, all of the controversy over the proposed selective deintermixture can be boiled down to one very simple fact. The 12 VHF channels simply cannot meet the needs of the people of this country and provide them with the choice of programing to which they are entitled, therefore, we must also employ the UHF channels. The industry's experience during the past 8 years proves without any question that UHF stations cannot develop their full potentialities in markets where they are forced to compete in the same market against VHF stations. So we are faced with the inescapable decision to adopt selective deintermixture in these eight markets so that the potentialities of UHF stations can be developed, or we must face the certainty of all-UHF operation, and in our opinion, if this present deintermixture proposal fails, we will very shortly find ourselves faced with a definite program for transition to all UHF. We believe that the capabilities of U.S. television service must be expanded to meet our expanding population, our expanding economy, and the increasing complexity of our political and social affairs.

Of course in effecting selective deintermixture as proposed by the Commission, there are eight VHF stations which would be required to switch to a UHF channel. Such a transition is not easy for any station to accept, so this has quite naturally produced opposition to deintermixture. But the widespread claims that deintermixture will deprive hundreds of thousands of people of television service simply is not true. Deintermixture will not leave large rural and small town populations without acceptable television service. The major portion of the service provided by a deleted VHF station will be replaced by UHF facilities of reasonable power and antenna height. The areas within the service area of a VHF station lying beyond the effective service of a replacement UHF facility fall within the service areas of stations in other markets. On the other hand, deintermixture will provide in these eight markets full program selection from all three networks. Within the predicted service areas of UHF stations in these eight markets there are almost 1½ million television homes. At the present time over 80 percent of these homes do not have the full program selection they have every right to demand. Deintermixture means that these homes for the first time will have full program selection. The net net of selective deintermixture in these eight markets is therefore, that it will bring to approximately 4

million people full program selection, which they do not now have, or the offerings of the three networks and their affiliated local stations.

May I thank you in advance for your courtesy in receiving this letter.

Sincerely,

JAMES C. HAGERTY.

OLYMPIC RADIO & TELEVISION,
Long Island City, N.Y., March 2, 1962.

Hon. OREN HARRIS,
House of Representatives,
Washington, D.C.

DEAR REPRESENTATIVE HARRIS: This letter is written relative to your forthcoming subcommittee meeting on the UHF/VHF television receiver proposal of the Federal Communications Commission.

Olympic Radio & Television is a division of the Siegler Corp. and was established over 27 years ago. We currently employ 1,500 people at our 2 plants on Long Island and are vitally interested in the outcome of this pending legislation.

On August 3, 1961, I wrote to you regarding my views on S. 2109 and its companion bill H.R. 8031. At that time I stated that every major television manufacturer produces and inventories television sets capable of receiving UHF channels. As an industry we would like nothing better than to have the public buy up all our UHF sets and clamor for more. This would represent an increase of approximately 15 percent on our gross sales dollar volume of television receivers, and every company strives desperately to increase their volume of sales. The simple fact of the matter is that the public has not bought these 82-channel receivers in any significant volume. Obviously, consumers in VHF market areas did not want to pay the premium for television sets capable of all-channel reception when there were no stations to transmit on the high channels. In areas where VHF and UHF stations existed, the public did buy the all-channel sets. Interestingly enough, when the UHF stations in an all-channel area went off the air, the public reverted to the purchase of television receivers capable of receiving only VHF.

The overall objective of expanding television service through the use of the present 82 channels is desirable and necessary. I am taking issue not with the objective, but rather with the approach to that objective. It is my firm belief that more can be accomplished by creating an atmosphere wherein UHF can grow on its own merits than can be accomplished by Government edict. Government can, however, provide a tremendous help in creating this atmosphere for growth. It has been suggested that a working commitee which includes a cross section of the broadcasting industry, the manufacturing industry, the distributors and retailers of television units, the educators who will need UHF service for their educational programs and the public as represented by the FCC, could under the guidance of Congress together propose a program which is reasonably acceptable to everyone. Precedent for such cooperative action has been set in our industry in the past, and I believe this approach should be tried in the present situation also.

One prime objective of this should be the establishment of a positive promotional approach directly to the public. Once the public is sold on the advantages of the UHF band, there is nothing which could stop the production of all-channel receivers. The transition to the 82 channel basis would take place in an orderly and progressive manner, the goal of the FCC would be attained, and the public would be the benefactor of an expanded service without really feeling the pinch of the higher prices which they will have to pay.

Sincerely,

OLYMPIC RADIO & TELEVISION,
MORRIS SOBIN, *President*

AMERICAN CIVIL LIBERTIES UNION,
New York, N.Y., March 6, 1962.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce, House of Representatives, Washington, D.C.

DEAR CONGRESSMAN HARRIS: We wish to register our strong support of H.R. 8031, a bill to amend the Comunications Act of 1934 in order to give the Federal Communications Commission certain regulatory authority over television receiv-

ing apparatus. Since the present 12 VHF channels, by common consent, cannot meet the public's need for diversified programing, we think it essential that Congress authorize the FCC to require manufacturers, to produce for sale in interstate commerce, only TV sets capable of receiving both VHF and UHF signals.

We note that various other bills have been introduced which would limit or abrogate the FCC's authority to shift stations from VHF to UHF. The American Civil Liberties Union is convinced that Congress should not take from the FCC its necessary powers of allocation. In every geographic area, we should expect the FCC to act in the interests of the community of listeners concerned.

We should be grateful if this statement is included in the record of your committee's hearings.

Sincerely,

ERNEST ANGELL,
Chairman, Board of Directors.

SUMMIT RADIO CORP.,
Akron, Ohio, March 6, 1962.

Hon. OREN HARRIS,
Chairman, House Commerce Committee,
Washington, D.C.

DEAR CONGRESSMAN HARRIS: As the operator of a UHF Station (WAKR–TV, channel 49) in Akron, Ohio, in an intermixed area completely overshadowed by 3 nearby VHF stations in Cleveland, Ohio, we would like to give you the benefit of our experience, gained in almost 9 years of operation. We believe this will be helpful to you in your present consideration of all-channel set legislation.

You will undoubtedly receive testimony from certain groups that all-channel receiver legislation would make deintermixture unnecessary. Their theory is based on the assumption that if all receivers are UHF-equipped, UHF stations will be able to compete effectively with VHF stations in the same areas. Our experience has shown that deintermixture must be continued on the broadest basis possible, and that all-channel set legislation (which is a major forward step) will not by itself solve the problems that beset UHF stations in intermixed areas.

The majority of the sets sold in the Arkon area during the past 8 years were equipped to receive our UHF stations. Therefore, the economic difficulties we have had, and are still experiencing in the operation of WAKR–TV, were not caused by the lack of UHF receivers.

Our experience, as well as that of many others, has shown that UHF cannot compete with VHF in the same area, due to the technical performance inequalities of UHF and VHF receiving and transmitting equipment. As long as these inequalities exist, UHF can never compete side by side with VHF, even if 100 percent of the sets are UHF-equipped.

Experience has shown that even complete UHF conversion alone would not be enough, in an area such as Akron, receiving three city-grade VHF signals. For the viewer to receive a signal on UHF comparable to that provided by the nearby VHF stations, the set owner must go to the extra expense of having an additional UHF outside antenna installed. Even when the viewer is willing to pay therefor, we have found that a great percentage of such antennae are improperly installed, with a resultant poorer UHF picture than that received on VHF. Several years of frequent educational and instructional group meetings with the servicemen have not improved their installation techniques.

Still more disastrous, even where a UHF antenna is properly installed, is the shorter life of the UHF oscillator tube, which is the heart of the UHF set. This frequently means that the set, a few months after it has been installed, will no longer pick up UHF signals, but will continue to pick up VHF for years.

In a market where the signals of three VHF can easily be viewed, there is little incentive for the set owner to go to the expense of having the UHF portion of his set put back in working order. This they will do in areas where UHF signals alone are available, but not where a variety of program fare can easily be received from other sources.

In short, the mere fact that 83 percent of the sets in Akron, when installed, were equipped to pick up our UHF station does not mean that they are able to do so 6 months later. Our experience has shown that this is exactly what happens in an overshadowed market such as Akron, where despite its fairly high

original conversion, WAKR–TV comes up with a weekly net circulation of only 42,000 TV homes in an area of 146,800 TV homes.

Since the UHF sets today are virtually the same as they were in 1953, there is very little prospect of any UHF set improvement in the foreseeable future. That is why deintermixture must be continued and expanded, in addition to the passage of all-channel set legislation, so that all stations in an area will be on an equal basis—either all UHF or all VHF.

The previous recommendations endorsing deintermixture made by the Antitrust Subcommittee of the House Committee on the Judiciray in 1957, as well as similar endorsements of deintermixture made in 1956 by the Senate Committee on Interstate and Foreign Commerce, are still 100 percent correct. The all-channel bill has been hailed by some, including those who would like to maintain the status quo, as the complete solution to the UHF problem. This is merely a theoretical assumption. Our experience has shown, if the bill is to succeed in accomplishing its purpose, it must be accompanied by deintermixture—otherwise, it is doomed to failure, just as were the intermixed allocations of the sixth report and order.

We hope that your committee will press for all-channel set legislation, without any prohibition of deintermixture.

Very truly yours,

S. BERNARD BERK, *President.*

AUBURN UNIVERSITY,
Auburn, Ala., March 1, 1962.

Congressman OREN HARRIS,
U.S. House of Representatives,
Washington, D.C.

DEAR CONGRESSMAN HARRIS: It will not be possible for a representative of the Joint Council on Educational Broadcasting to appear before your committee when it considers legislation which would require the manufacture and distribution of all-channel receivers on March 7–9, 1962. However, our organization does have an interest in this legislation and has already gone on record in the recent Senate Commerce Committee hearing on all-channel receivers.

I would therefore appreciate your making this letter a part of the record in the aforementioned House Commerce Committee hearings.

Since its creation in 1952, the Joint Council on Educational Broadcasting (formerly the Joint Council on Educational Television) has been the chief spokesman for organized education in the field of television. It represents a bulwark against any erosion of the principle of channel reservations for educational purposes. It is likewise a unified voice of education in matters pertaining to the improvement of educational television opportunities under consideration by Federal regulatory agencies and various committees of Congress. Through the years, the JCEB has gained ever increasing stature in American broadcasting, and has provided leadership in enunciating important educational policy decisions. Its statements, we believe, have had a salutary effect upon the modifications of the FCC's national pattern of TV allocations.

While each constituent member of the JCEB has a special interest in the wise use of both television and radio for educational purposes, it is the JCEB itself which continues to serve as the forum for the formulation of policy on national issues affecting all aspects of educational broadcasting.

The constituent members of the JCEB are:

American Association of State Universities and Land-Grant Colleges.
American Association of School Administrators.
American Council on Education.
Council of Chief State School Officers.
National Association of Educational Broadcasters.
National Education Association of the United States.
National Educational Television and Radio Center
State Universities Association.

The Joint Council strongly supports legislation which will require that TV receivers for public use, shipped in interstate commerce or imported into the United States, provide all-channel reception. We feel, however, that Federal authority in prescribing minimum reception capabilities for TV receivers should be limited to the all-channel objective.

The Joint Council has for many years supported legislation which would encourage the manufacture and sale of all-channel TV receivers. On May 22, 1956,

in a letter to Senator Warren G. Magnuson, chairman of the Senate Interstate and Foreign Commerce Committe, the Joint Council commented upon the study that the committee was then making in the field of telecommunications. An important aspect of this study was the obstacle encountered in the utilization of UHF. In this May 22 letter, the Joint Council reviewed the possibilities of the removal of the 10 percent excise tax on all-channel receivers. We indicated our reluctance to reach the conclusion that Federal legislation was called for. However, we did suggest that "unlike the subsidies that have been granted in certain other fields, it may be reasonably expected that the need of preferential legislation for UHF television receivers would endure for only a few years."

On October 1, 1956, the Joint Council presented formal comments to the FCC relating to the Commission's inquiry into the feasibility of transferring all television broadcasting to the UHF band (docket No. 11532). At that time we made the following statement: "We propose * * * that the Commission designate one or more of its members with staff associates to participate in the formulation of a specific legislative proposal to foster the manufacture and distribution of all-channel television receivers. We suggest that steps be taken to secure the participation of representatives of the authorized congressional committees and executive agencies and of the manufacturers and distributors of television receivers, and of other interested groups. Only by such cooperative and systematic action can equitable and offective legislation be formulated and enacted."

In a subsequent statement filed with the FCC (*In the Matter of Investigation of the Rules, Policies, and Standards Applicable to the Allocation and Use of Television Broadcast Channels and Stations for Noncommercial Educational Purposes*, AM No. 71, the Joint Council made another reference to the desirability of Federal legislation which would encourage the manufacture and distribution of all-channel TV sets.

From the outset of the educational television movement in this country, the Joint Council has had an important stake in the development and progress of UHF TV broadcasting. A total of 276 channels are now reserved for noncommercial educational use. Of this number, 92 are VHF and 184 are UHF. In other words, 66 percent of the total number of channels reserved for education are in the UHF band. As of February 21, 1962, 63 ETV stations are on the air (44 VHF and 19 UHF [1]). Viewed in terms of percentages, the educational TV stations on the air represent 23 percent of the total number of reserved channels. VHF channels have been activated much faster than UHF channels; however, the VHF and UHF educational stations on the air represent 48 percent and 10 percent of the VHF and UHF reserved channels, respectively.

In a substantial number of communities where UHF ETV stations are operating, the emphasis is upon programing of an academic nature: direct instructional programs designed for classroom use, or for formal adult education. This programing pattern is often a matter of necessity. UHF ETV stations in predominantly VHF reception areas find it most difficult to reach a wide audience of out-of-school viewers with programing of an informal nature because of the lack of TV sets in these areas capable of receiving the UHF signal.

This presents enormous handicaps, for ETV stations strive to achieve a balanced program schedule, one which is responsive to both the direct instructional requirements of its audience as well as the desire for informal programs in the arts, humanities, sciences, public affairs, and children's programs. While it may be possible for a UHF ETV station to reach a "captive" audience in an academic setting, the lack of all-channel sets effectively denies the full potential of noncommercial TV broadcasting.

The 19 ETV UHF stations now on the air are clearly providing an important service to their communities. It is, therefore, most regrettable that this service is confined to a comparatively limited number of TV viewers. For example, after nearly 8 years of programing on UHF channel 48, the signal of WCET, Cincinnati's ETV station, reaches an estimated 30,000 sets out of a potential of more than 400,000 sets.

Conditions have not greatly improved UHF service since our first UHF educational TV station went on the air. In the latter part of 1961, educational TV station WETA in Washington, D.C., began its programing on UHF channel 26. Present estimates suggest that the programing on this channel can be seen on approximately 55,000 sets out of a total of some 900,000.

[1] Three VHF and five UHF ETV stations are operating on nonreserved channels.

These are only two illustrations of the problems of bringing excellent TV programing to a wide audience via a UHF television facility. While generalizations are hazardous, these are "typical" demonstrations of the fact that some solution must be found to solve the technical riddle of UHF. While we are not prepared to state that legislation requiring all-channel television receivers will provide the total answer to the UHF dilemma, it is clearly apparent that such legislation would serve to accelerate greatly the growth and development of noncommercial educational television in the UHF band.

With best wishes, I am,

Cordially,

ROBERT C. ANDERSON,
Executive Vice President,
Chairman, Joint Council on Educational Broadcasting.

ADMIRAL CORP.,
Chicago, February 20, 1962.

Hon. OREN HARRIS,
Chairman, Interstate and Foreign Commerce Committee, House Office Building, Washington, D.C.

DEAR CONGRESSMAN HARRIS: We desire to call to your attention Senate bill S. 2109 introduced on June 20, 1961, by Senator Magnuson.

While this bill proposes that the Communications Act of 1934 be amended to authorize the Federal Communications Commission to prescribe minimum performance capabilities for television receivers, Senator Magnuson explained that its introduction was prompted by a desire to promote the distribution of all-channel receivers covering both the VHF and UHF channels.

Admiral favors the development of UHF (ultra high frequency) TV receiver production and UHF telecasting and is on record with a proposal for a 3-year interim plan to permit an orderly transition from VHF to UHF operations. A copy of this proposal is attached.

However, we are strongly opposed to Senate bill S. 2109 which does not refer to the UHF proposition but is so vague and all-inclusive that its language appears to be an attempt at complete Federal regulation of the television receiver manufacturing industry.

Cordially,

ROSS D. SIRAGUSA.

ADMIRAL POSITION ON ALL-CHANNEL TV OPERATIONS

1. Admiral Corp. proposes an interim period of 3 years during which all excise taxes would be removed from television receivers shipped with installed UHF (ultra high frequency) tuners. This would give manufacturers sufficient time to design a suitable all-channel tuner.

2. At the end of this 3-year period the VHF (very high frequency) band would be eliminated and all telecasting would be in the UHF channel area. All TV receivers produced at the end of the transition period would have UHF tuners.

3. The excise tax would be reinstated on TV receivers produced on and after the date the order for complete UHF operation becomes mandatory.

NATIONAL BROADCASTING CO., INC.,
New York, N.Y., March 5, 1962.

Hon. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
House of Representatives, Washington, D.C.

DEAR CHAIRMAN HARRIS: The views of the National Broadcasting Co., Inc. with respect to proposed legislation for requiring television sets to be equipped to receive channels in both the VHF and UHF were set forth as follows by Mr. Robert W. Sarnoff, chairman of the board of NBC, in his appearance before the Federal Communications Commission on January 29, 1962:

"NBC supports the objectives of the proposed legislation for requiring television sets shipped in interstate commerce to be equipped to receive channels in both the VHF and UHF. We recognize that the purpose of the legislation is to foster the development of UHF—a purpose we strongly favor. We have always felt, and continue to feel, that television's potential can best be realized by maximum utili-

zation of both the 12 VHF channels and the 70 UHF channels; and that a system limited to either the VHF channels or the UHF channels would be an undesirable limitation on the medium itself.

"This has not only been NBC's stated position over the years, but we have matched it by our development and support of UHF from the beginning. In 1949, NBC helped UHF get started by constructing and operating the experimental UHF station in Bridgeport, which was the first such station to present regular programing. We made substantial investments to promote UHF operations in intermixed markets through two UHF stations NBC acquired and operated for a period of years, and we were the last network company to relinquish its own UHF operation.

"Although we support the purposes of the legislation, we do have a reservation about the principle involved, since it would result in requiring all purchasers of television sets to pay more for them whether or not they want, or can use, the added feature of UHF reception.

"However, as the objective is to foster better utilization of the UHF band without reducing the value of the VHF band for television, we feel that, in balance, its advantages outweigh its disadvantages and on this basis we support it."

This represents the position of the National Broadcasting Co., on the question of all-channel receivers which your committee is considering, and we would appreciate inclusion of this letter in the record of the committee's proceedings on this matter.

Respectfully submitted.

NATIONAL BROADCASTING CO., INC.,
By THOMAS E. ERVIN,
Vice President and General Attorney.

TRIANGLE PUBLICATIONS, INC.,
RADIO AND TELEVISION DIVISION,
Philadelphia, Pa., March 8, 1962.

HON. OREN HARRIS,
Chairman, Committee on Interstate and Foreign Commerce,
Washington, D.C.

DEAR CONGRESSMAN HARRIS: As an affiliate of the ABC–TV network, WFIL–TV received the enclosed copy of a letter dated March 5, 1962, from the network's vice president, Robert L. Coe. The network letter urges all of its affiliates to engage in a continuing lobbying effort to convince all legislative representatives of the necessity to delete a VHF channel from eight specific markets and to convert these markets to all UHF.

The ABC–TV network takes the position that the deintermixture of these eight markets would serve the public interest for the reason that it would provide that network with an outlet in these communities. In urging this result, without revealing or even alluding to the critical differences among the communities involved—and particularly differences in topography and terrain—ABC–TV has confused the public interest with its own private interest.

Triangle Publications, Inc. is also the licensee of WNBF–TV, Binghamton, N.Y., one of the eight markets specifically proposed for such selective deintermixture. It is also licensee of KFRE–TV in Fresno, Calif., a community in which only UHF stations are presently operating. This latter circumstance results from the fact that Triangle Publications, Inc., the only television licensee to do so, voluntarily acceded to the deintermixture of Fresno. A UHF station is also operated by Triangle in Lebanon, Pa. As a result, Triangle is thoroughly familiar with the facts and considerations involved in the program of so-called selective deintermixture generally, and the facts involved in the proposal looking toward the deintermixtures of Binghamton.

Triangle has carefully refrained from intervening in the deliberations of your committee and from participating in the hearings in any way. However, in view of the solicitation by ABC–TV of the legislative support of its affiliates particularly without presenting the factual differences involved, Triangle believes it appropriate and necessary to place the pertinent facts before your committee and the affiliates.

On February 9, 1962, Triangle filed comments with the FCC addressed to the overall problem involving UHF telecasting. In those comments Triangle urged a basic reevaluation of the underlying standards with a view toward improving

the quality of television in the UHF band. Ten days later, ABC–TV filed its comments and urged the Commission to adopt essentially the same program which had previously been advanced by Triangle. Nevertheless, in its letter dated March 5, 1962, in soliciting the support of its affiliates, ABC–TV neglected to advise them of its professed awareness of the need for the basic program which it had urged on the Commission.

Another glaring omission in the letter of ABC–TV to its affiliates, which is at least equally serious is its complete failure to inform its affiliates of the well established and universally recognized critical effect of terrain on the propagation of television signals in the UHF portion of the spectrum. Instead, wielding a broad brush, and obviously impelled solely by the dictates of its own private interests, it painted a picture which placed Binghamton in the same perspective with other and totally dissimilar communities.

The critical effect of the extremely rugged and mountainous terrain in Binghamton on the UHF has been established not only on the basis of theoretical engineering predictions: Rather this fact has been made painfully clear over the course of several years as the result of the attempts of WINR–TV to operate a television station in Binghamton on a UHF channel. The operating experience of that station, disclosed by the licensee, Binghamton Press Co., Inc., in its comments filed with the FCC, conclusively establishes that UHF operation in Binghamton is not feasible.

The denial of effective service (which amounts to two-thirds of the audience now served by WNBF–TV) was supported by the results of a detailed and extensive study made by Dr. Frank G. Kear of the engineering firm of Kear and Kennedy, a copy of which is enclosed.

Sincerely yours,

ROGER W. CLIPP.

SOUTHLAND INDUSTRIES, INC.,
San Antonio, Tex., March 5, 1962.

HOUSE INTERSTATE AND FOREIGN COMMERCE COMMITTEE,
New House Office Building,
Washington, D.C.

GENTLEMEN: We are members of and will be represented by the National Association of Broadcasters and the Maximum Service Telecasters, Inc., at the public hearings to be held starting Monday, March 5, 1962, on the various proposals for all-channel receiver legislation. Because WOAI–TV is located in the center of a large, predominantly agricultural and ranching area, we wish to make a separate statement.

The nearest operating television stations from San Antonio are located at Houston, 190 miles; Austin, 70 miles; Corpus Christi, 150 miles; and San Angelo, 180 miles. The urban areas between San Antonio and these cities are all small and are not economically capable of supporting a television facility. Consequently, people in these areas must rely on long-distance reception for their television service. In addition, there are seven community antenna systems and one UHF translator located at distances of 90 to 160 miles, repeating the programs WOAI–TV and other TV stations to several thousand viewers. These would be denied service if VHF facilities were deleted.

A great injustice would be done to the people of south Texas if VHF stations were required to shift to a UHF frequency. The economic and cultural requirements of south Texas demand the continuation of the present service, and we are therefore opposed to any bill not having provisions prohibiting deintermixture and all UHF operation.

Sincerely yours,

JAMES M. GAINES, *President.*

ELECTRONIC INDUSTRIES ASSOCIATION,
Washington, D.C., March 23, 1962.

Chairman and Members, Senate Communications Subcommittee, and House Interstate and Foreign Commerce Committee.

GENTLEMEN: A giant step toward the objective of a truly national television broadcasting service can be taken with utmost possible speed if the Federal Communications Commission will issue licenses authorizing all commercial

very high frequency stations, of which there are now 458, to begin simultaneous broadcasting on ultra high frequency channels.

To give the American public the kind of balanced television broadcasting it deserves, with the broadest possible choice of programs, is the earnestly sought goal of the Congress, the President of the United States, the Federal Communications Commission, and of members of the television broadcasting and receiver-producing industries. It is the intended purpose of all-channel set legislation before your committees.

Immediately opening up 458 VHF operations to side-by-side UHF broadcasting would have, we believe, these desirable results, among others:

1. It would foster the orderly growth of UHF. A substantial group of experienced broadcasters would be in a position quickly to enter the UHF field. Some would program simultaneous VHF-UHF broadcasts, but many would use UHF facilities for public affairs, news, educational, cultural, and local-interest programing which they may now be unable to schedule because of network and sponsor commitments. By reason of their experience, these broadcasters could be expected to demonstrate the utility of UHF and thereby make it attractive for venture capital to enter this field. Side-by-side service is now common in AM-FM radio broadcasting and many stations have been able to make it commercially profitable to cater to the tastes of two distinct audiences.

2. It would give the public a basic reason for buying all-channel receivers. People cannot be expected to pay approximately $30 in additional receiver cost plus antenna and installation charges of as much as $60 to get equipment to receive a service which is not available in their area.

3. It would give the manufacturers a sound reason for producing all-channel sets. It cannot be doubted that set makers will quickly produce and promote the sale of all-channel receivers once the public has a reason—UHF program availability—to buy them. The producers have a critical need for new markets. They now are frozen on a plateau of about 6 million sets a year. With prices steadily declining due to competition, they must sell more sets merely to keep revenues at present levels.

4. It would give broadcasters an additional facility for program expansion and diversification at minimum cost and technical difficulty. Channel 31, New York City, uses one bay of the channel 2 antenna on the Empire State Building without significant interference with radiation patterns. VHF stations, in other words, can go on the air with UHF without building a new tower. The cost to an existing VHF station for a UHF antenna, UHF transmitter, and other equipment items will range from $70,000 to $270,000, depending upon the power to be used. This averages out to less than half the cost of building a UHF station from the ground up.

On the basis of their testimony before your committees, we believe a majority of leading broadcasters would take advantage of UHF license availability to expand their services in the interest of the public and to enhance their growth prospects. If necessary, of course, the Federal Communications Commission is in a position to insist upon use of UHF channels through exercise of its power to license and renew licenses. Moreover, should it be found that legislation is absolutely essential—and the Electronic Industries Association is convinced that it is not—we see no reason why the same law that requires manufacturers to produce only all-channel receivers should not also require VHF broadcasters to provide UHF service as well.

FCC Chairman Newton N. Minow, in testimony on all-channel set legislation, estimated that it would take at least 6 years for UHF broadcasting expansion to materialize. If the law worked at all—and this we unreservedly doubt—6 years is too long to wait for the building of a national television service. Furthermore, we believe the Chairman to have been overly optimistic in his estimate of 1 year to clear present-set pipelines, 1 year to get into all-channel receiver production, and 4 years to get enough all-channel sets into television homes to provide a full opportunity to evaluate this legislative experiment.

The FCC Chairman's 6-year timetable was based on three assumptions.

One was that no manufacturer would continue to make VHF-only sets for sale within each State in which he produces. Such sales, of course, would upset the timetable by slowing down the rate at which all-channel sets could be placed in television homes. We think the Chairman's assumption that no manufacturer would try to develop an intrastate business in VHF sets is unrealistic because the market potential for sales within States is very considerable. This market would be especially attractive, furthermore, because VHF receivers could be offered at prices substantially below those for all-channel sets.

In 1961 more than 40 percent of all TV sets were sold in States in which plants for their manufacture are situated. This amounted to more than 2,500,000 out of a total of 6,100,000 sets. California and New York each absorbed about 12 percent of the total. Your committees may be interested in the following table of sales of television sets by distributors to dealers in States in which manufacturers have plants.

1961 statistics on TV set sales

New York	657, 467
California	594, 469
Pennsylvania	374, 545
Illinois	355, 467
New Jersey	261, 920
Indiana	146, 951
Minnesota	89, 032
Tennessee	87, 037
Total	2, 566, 888

A second assumption of the Chairman was that there would be no protraction of "rulemaking procedures in which all interested parties, including receiver manufacturers and the public" would be given "full opportunity" to be heard. This assumption, of course, runs counter to experience in matters of this kind. The safest prediction to make about Federal agency proceedings is that they will take longer than the best estimates or intentions.

The FCC Chairman's timetable also assumed that the law would not be challenged in the courts. This association would not be in a position to make such a challenge. But we think it inconceivable that it would be allowed to stand uncontested by a single manufacturer.

We believe the FCC Chairman's 6-year schedule would drag out into 7, 8, or more years. Meanwhile, the Congress and the President would have deprived the American public of its freedom of choice in the marketplace. Throughout this experiment the public would be charged a substantial price premium for the privilege of buying home-entertainment equipment it may not want because the means of using the equipment's premium feature have not been provided.

In addition, the set manufacturing industry would be deprived of its right to determine for itself what it should produce for sale in interstate commerce, having to defer, like the consumer, to the omniscience of government.

Such an imposition upon a free people seems to us absolutely indefensible and, we believe, without precedent where no question of public health or safety is involved.

Your consideration of our proposal is respectfully urged.

L. M. SANDWICK,
Staff Director, Consumer Products Division,
Electronic Industries Association.

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D.C., October 17, 1961.

Hon. OREN HARRIS,
Chairman, House Interstate and Foreign Commerce Committee, Federal Building, El Dorado, Ark.

DEAR MR. CHAIRMAN: I very much appreciated your having made available to me for review and comment the September 18 letter to you from Federal Communications Commissioner Robert E. Lee relative to pending House Resolution 450. That resolution, which has been referred to your committee, would preclude the FCC from taking any further action toward deleting existing VHF channels and forcing operating VHF stations to the UHF at least until the Commission has completed its experimental study of UHF in New York City. The rush of adjournment matters and getting resettled back home have not permitted my earlier response to the committee concerning the assertions in Commissioner Lee's letter. However, I did very much wish to have my reply on record for the committee's early consideration upon readjournment next year.

House Resolution 450 was formulated, of course, with reference to the officially stated position of the FCC and its members before the House in seeking the substantial $2 million appropriation which they received for the New York experimental UHF study. Accordingly, it comes as a surprise to find Commissioner

Lee on his own individual initiative now seeking to modify the Commission's as well as his own expressed position before this House.

The statement accompanying my introduction of House Resolution 450 (found in the Congressional Record for Aug. 31, 1961, at p. 16733), was documented with verbatim quotations from the Commission's formal presentation, both written and oral, before the Subcommittee on Independent Offices of the House Committee on Appropriations. Any reading of the record, with these reiterated statements of explicit Commission position, fully establishes that the asserted need for the New York experimental UHF study was the general exploration into the UHF and its utility as a replacement service for TV allocations. The study was repeatedly urged on the House as one which might "yield a definitive answer to the usability of the UHF band from a technical standpoint." (FCC statement to that subcommittee, 1960 hearings, at p. 686.) The problems it would explore explicitly included determining costs and new development factors for UHF receivers and transmitting antennas, comparing propagation measurements on both VHF and UHF, and like aspects of UHF's general capabilities vis a vis the VHF.

For a complete and forceful demonstration of the interrelationship of the New York experimental study with the entire nationwide future of the UHF, I respectfully refer the committee to my said statement of August 31st. However, a few additional comments on specific points in the Commissioner's September 18 letter would seem in order. The cited Commission statements in the hearings before the Appropriations Subcommittee were set forth as representing the unified views of that agency with no dissenting or variant views noted for any individual Commissioner. In addition, it should now be noted that Commissioner Lee himself at that time individually voiced a similar and supportive position.

He attributed the purpose and need for the experimental study to the fact that: "* * * with respect to the seven Commissioners here you will find strong differences of opinion as to the relative merits of the U. & V., but you will find unanimity with respect to the fact we should perhaps find out more about this." (id., p. 690.)

He went on to state that: "The degree of disparity with respect to coverage is subject to some debate, but there is no question about the fact that it has improved. We propose to settle this problem by putting a station in New York City." (id., at p. 691.)

To like effect, he added that: "We would think we would be able to say either UHF does not work or it does work in the worst place in the country * * *." (Id., p. 691; see also his statements on pp. 700, 717–718, 722.)

The Commissioner's September 18 letter further refers to Pittsburgh as one of the moderate size cities in which UHF allegedly provides a satisfactory technical service. The Appropriations Subcommittee was especially interested as to why the Commission could not utilize the existing Pittsburgh UHF facilities for its experimental study rather than building from scratch two new UHF stations in New York at a cost of over $1 million. The Commission then insisted, however, upon the need for a New York study because—as stated both by another Commissioner as well as Commissioner Lee, and with the obvious concurrence of the entire Commission—"if it works in New York city the chances are it will work any place else in the country" (id., pp. 691, 704, 716–721). Clearly, this statement likewise refers to the question of the basic adequacy of the UHF rather than to the limited aim of exploring its effectiveness only in a huge metropolis. The latter aspect would have a limited utility and would scarcely have warranted such a major congressional appropriation.

All of this forcefully establishes in the Commission's own words what should otherwise be obvious. Namely, that there should not be any deletion of existing VHF service unless and until there is a convincing demonstration from the experimental study that UHF can substantially replace the lost service or can otherwise counterbalance such heavy loss. House Resolution 450 would withhold such administrative action at least until the results of the experimental study are available for study, comment, and application. Everyone—including those making the TASO report referred to in the Commissioner's September 18 letter—acknowledges that VHF has a vast coverage advantage over UHF. Commissioner Lee's assertion that UHF's difficulties are quite remote from technical factors is sharply in conflict with the conclusions of the TASO report, as well as with the Commission's many clear statements of policy and

fact, including those referred to above. If technical feasibility were in no way involved, there would appear to be no reason whatever for the indicated scope and direction of the New York UHF experiment, and perhaps for the entire project itself.

Beyond the immediate aspects of House Resolution 450, it is my firm belief that such existing and vitally needed VHF service as results from its basic coverage advantage should not carelessly be thrown away in favor of a theoretical hope of UHF replacement or a possible benefit to UHF elsewhere than in the very area so drastically affected. I might incidentally refer here to the difficulty of understanding even the Commission's proposing again to consider the deletion of existing VHF's in a handful of cities in view of its expressed conclusions to the Senate Committee on Interstate and Foreign Commerce (in a report of Apr. 23, 1959) that such limited deintermixture was "* * * too disruptive to be feasible as an interim measure and too inefficient * * * to serve as a longrun solution." On this basis the Commission therein flatly rejected such technique as being "ineffectual as a national allocation policy."

In light of this entire background, the Commission would seem to have a heavy burden in seeking to justify the deletion of existing VHF service vitally needed by rural and farm areas, such as now being provided on Madison channel 3. It cannot even hope to approach—much less to sustain—such burden without having available to it the results of the UHF experiment in New York. Only then could it evaluate more precisely the complete extent of UHF's technical disadvantages and the full costs of VHF deletion. House Resolution 450 is designed to provide such an opportunity and to forestall premature and precipitous administrative action in the interim. Ultimately, the need for its enactment by the House is clear wholly apart from any supporting statements by the FCC or any of its individual Commissioners.

For these reasons I have also urged that upon the readjournment of Congress, the House Committee on Interstate and Foreign Commerce should hold extensive hearings on this vital subject matter. I so respectfully urge again here in this letter to you, as the committee's chairman. I am much encouraged by reports that such hearings are in fact being scheduled. I look forward to an opportunity to participate in them to develop a forceful record on behalf of House Resolution 450 and the vital public interests it seeks to protect.

Thank you again for this opportunity to comment further on the matter.

Sincerely,

VERNON W. THOMSON.

CC: Members of the House Interstate and Foreign Commerce Committee.
Members of the Federal Communications Commission.

[From the Congressional Record, Aug. 31, 1961, p. 16733]

STATEMENT BY CONGRESSMAN THOMSON OF WISCONSIN ON INTRODUCTION OF HOUSE RESOLUTION 450

Mr. Speaker, I am introducing today a resolution concerning certain proceedings before the Federal Communications Commission which I believe would have the most serious adverse effect on the people of my district and of my State of Wisconsin, as well as on hundreds of thousands of other people in other areas of the United States. The resolution also demonstrates the grossly inconsistent if not misleading position taken by the Federal Communications Commission respecting substantial appropriations which it has requested and recently obtained from the Congress.

I refer specifically to the FCC's actions on July 26, 1961, which initiated proceedings proposing in eight cities—including by State capital of Madison—to delete existing VHF channels on which a VHF station is currently providing vitally needed TV service, and to compel those VHF stations to shift from the VHF to an admittedly inferior, in terms of coverage, UHF channel. This proposed destruction of valuable VHF frequencies and service would under any circumstances be considered most extreme and very harmful to the public's best interests. When, as here, it is prematurely taken without any of the basic technical data which the Commission has represented to Congress that it does not have and has in fact obtained special appropriations to attempt to obtain—then I submit the Commission has far overstepped the bounds of reasonable admin-

istrative action and this House must take appropriate action to prevent the vast harm threatened by its administrative arm, the FCC.

To go back in time for a moment, the FCC during the 86th Congress sought a special appropriation in excess of $2 million to conduct an experimental study of ultrahigh frequencies—or the UHF, as they are called—to be held in New York City. The Subcommittee on Independent Offices of the House Committee on Appropriations, chaired by the Honorable Albert Thomas, of Texas, was naturally quite concerned with the need and justification for such a substantial appropriation, amounting as it did to one-sixth of the Commission's entire annual budget. The Commission and its individual Commissioners in hearings before the subcommittee asserted what they believed to be compelling justification for such special appropriation in response to probing inquiry by subcommittee members. The subcommittee was advised and I quote from the Commission's formal statement of record that there was "need for a special engineering study into the effectiveness of UHF television," and that "the aim of this project is to determine facts which would aid in the resolution of the television allocations problem which has been a source of serious concern to the Congress, the broadcasting industry and the Commission." The study was to cover the entire range of UHF operations including, and I again quote: "All phases of a development, measurement and field testing for UHF television."

The House was further told that funds for the study were necessary, since—and I again quote: "Until comprehensive knowledge of UHF services and capability is obtained, there is little hope of successfully utilizing UHF on a nationwide basis."

And, that every effort would be made to evaluate the effectiveness of UHF broadcasting so as to seek to find—and again I quote: "The assurance that UHF could be effectively utilized" (subcommittee hearings, par. 2, at p. 684).

That was the Commission's own initial statement which went on to refer to the substantial advantages of very high frequencies—or VHF television—in terms of its wider and more reliable coverage, its superior receiver and antenna characteristics and the more widespread distribution of VHF receivers.

All of these asserted needs for a special experimental UHF study were reiterated by the individual Commissioners in response to subcommittee questions. It was clear that the Commission sought to find out more about UHF capabilities so as to determine its capacity for replacing the VHF in the United States as a possible—and I repeat possible—solution to TV allocations problems. Thus, it was agreed to be, and I again quote: "The feeling of the Commission that you cannot arrive at a conclusion with respect to UHF without this study" (id., at p. 704).

The Appropriations Subcommittee was also quite concerned that the UHF study was proposed to be held in New York City which would require the erection of two new UHF stations from the ground up at a cost in excess of a million dollars alone, whereas there were existing UHF stations in other cities such as in Pittsburgh which could have been utilized for this purpose at a much lower, if not minimal, cost. The Commission insisted upon a UHF study in New York for the reason as stated by one of the Commissioners that—and this, too, is a quotation—"if it works in New York City the chances are that it will work any place in the country" (id.).

With the closest particular respect to the subject matter of my resolution, it was finally stated by one subcommittee member with FCC approval that—another direct quotation: "The Commission does not want to move toward definite conclusions with respect to whether or not they all ought to be UHF or whether there ought to be an intermixture or whether there ought to be a demixture unless they have some sort of study upon which to base their conclusions. This would seem to be an expensive way but the only way the FCC can actually arrive at the decision as to what is going to happen to UHF" (id., at p. 721).

On the basis of these assertions, the 86th Congress specially appropriated and made available for the special UHF study the amount of $2 million.

That FCC study is only just now getting underway, with its actual operations now scheduled to commence in late 1961 and the final Commission results not due to be completed until January 1963. In fact, the Commission has just requested that the Congress insert new language in its present appropriations bill to extend the availability of the special study appropriation past June 30, 1962, for an additional 6 months.

Since the study has not yet even commenced, the Commission obviously has not obtained any data from it with respect to UHF capabilities or other technical aspects.

Despite this absence of UHF data, the Commission on July 26, 1961, took those allocations actions I have referred to, proposing fundamental changes in our television system. These were the proposals in eight cities, including Wisconsin's capital city of Madison to delete existing VHF channels and service, and compelling VHF stations to shift from their present VHF channels to the narrower coverage and less reliable UHF. Madison channel 3 was proposed for extinction in this ad hoc, haphazard manner, as well as seven other operating VHF stations in the significant cities of Montgomery, Ala.; Columbia, S. C.; Champaign-Urbana, Ill.; Binghamton, N.Y.; Erie, Pa.; Hartford, Conn.; and Rockford, Ill., about which this House has already heard and will undoubtedly hear further.

The proposed deletion of Madison channel 3—or "deintermixture," as the FCC sometimes deceptively labels it—would take from south-central Wisconsin one of its most vital natural resources. That is a television channel serving the vast rural and agricultural areas of that region, and linking those hundreds of thousands of people with their State Capital of Madison. Without Madison channel 3, because of the admitted technical disparities of substituted UHF television, tens of thousands of people would actually be deprived of their only regular and reliable television service, or of one of the only two or three regular and reliable television services they may now enjoy. No major metropolitan center of the United States which may have as many as five or seven VHF stations plus countless other services, is proposed to lose as much as one VHF channel. Yet here, the Commission—without any of the technical data which they are spending $2 million to try to obtain—now would deprive countless Wisconsinites, as well as other areas, of the basic television service on which they so heavily depend and rely. This is nothing less than an outright discrimination against the rural and agriculture citizens of Wisconsin. It is an attempted repetition in television of the unfortunate situation in radio in which these same people and the State of Wisconsin never received their rightful share of prime radio facilities.

It is for these reasons that I have introduced a resolution which would preclude the Commission taking any further action looking toward deleting existing VHF channels and forcing existing VHF stations to shift to the UHF, until it has at least completed the current experimental study of UHF in New York City for which Congress has appropriated $2 million. By the Commission's own representations in seeking this considerable appropriation, it has made clear that it does not now have any of the proper technical data upon which to seek to take such harmful action. Either this is so or the Commission has misled this House into an appropriation which it did not need, was not entitled to, and is now wasting. But let us assume that this latter possibility is not so. Then, only when the experimental UHF study is fully completed could the Commission possibly obtain the technical knowledge and assurance of UHF capabilities which it admittedly now does not have and is currently exploring. To delete existing and vitally needed VHF channels and services before that time would amount to administrative folly as well as a tragedy for the people who would thereby be deprived of the regular television service to which they are entitled. Accordingly, I urge this House to pass the resolution which would at least safeguard its own appropriations processes as well as prevent the premature and so particularly harmful administrative action now threatened by the Federal Communications Commission.

Before the Federal Communications Commission, Washington, D.C.

FCC Docket No. 14229 (to the extent that it may involve Madison Channel 3 deintermixture)

IN THE MATTER OF FOSTERING EXPANDED USE OF UHF TELEVISION CHANNELS
FEBRUARY 16, 1962

COMMENTS OF CONGRESSMAN VERNON W. THOMSON

I, Vernon W. Thomson, United States Congressman from the 3d District of the State of Wisconsin, on behalf of my constituency, herewith submit my comments in opposition to the contemplated deletion-deintermixture of Madison channel 3

in FCC Docket 14239, as well as in FCC Docket 14229 to the extent that it may involve the same Madison reallocations proposal.

I believe that on the compelling facts of record before it the Commission should again deny—and this time finally—the proposed reallocation of Madison channel 3. Rather, the public interest requires that it should once again reaffirm that channel allocation as it has stood since 1952 as an integral part of the nationwide Table of Television Assignments. Otherwise the Commission would be discriminating against the entire Madison area in depriving it of its sole VHF facility in contravention of the requirements of Section 307(b) of the Communications Act for a full, fair, and equitable allocation of TV frequencies, and in disregard of the pressing needs of the area for the continued service brought to it by that channel.

Should the Commission not be immediately disposed to forthwith deny the proposed allocation (as it is submitted it should), then at the very least it should withhold its consideration and final decision on this proposal until it has completed its UHF experimental program in New York, and has also resolved the matter of the wider nationwide distribution of UHF receivers either pursuant to proposed all-channel receiver legislation or otherwise, and until scheduled congressional hearings on these allocation matters have been completed. Certainly in light of the pendency of these matters (not to speak of the heavy and destructive costs of the Madison deintermixture proposal itself), there is no action which the Commission may appropriately now take other than final and complete denial of that or any Madison reallocation. By doing so, the Commission in the public interest could more equitably and effectively, and with greater security and assurance for the preservation of existing TV service to those people now depending on it, then go forward to explore the various general basis for further development of the television medium on the overall, nationwide level.

Before turning to a more detailed discussion of the merits of the Commission's proposal, I believe that a brief statement of my personal background will indicate the basis for my deep and continuing interest in matters so vitally affecting my constituency and such a large part of my State of Wisconsin. I am a native of Wisconsin and of the Madison area. Born in the city of Richland Center in that area, I have throughout my life made my home in Richland Center and/or Madison. I attended school in Richland Center and later the University of Wisconsin in Madison, both as an undergraduate and in its law school. I was mayor of Richland Center for three terms beginning in April 1944, after serving as its city attorney and as the assistant district attorney of Richland County. I was a member of the Wisconsin State Assembly from this area for a period of 16 years and served three terms as speaker of that assembly. After serving as attorney general of Wisconsin from 1951 to 1957, I was Governor of the State of Wisconsin in 1957–58. I have from time to time engaged in the private practice of law both in Madison and Richland Center, and my family home is in Richland Center. Accordingly, my knowledge of the Madison area, including its television services and its heavy dependence on Madison channel 3, is derived from the most intimate, firsthand, and personal knowledge of this region and of the people in it who are my constituents as well as my friends and neighbors.

To further indicate my concern with the Commission's reallocation proposal, I should point out that my 3rd Congressional District comprises the 10 counties in the Madison area; namely, Richland, Iowa, Sauk, Crawford, Grant, Juneau, La Crosse, Lafayette, Monroe, and Vernon. Their total population under the 1960 census was 299,625. Almost all of these people would in one related way or another be most closely and adversely affected by the Commission's proposal to reallocate Madison channel 3. For, in essence, it would deprive them of the television service currently being provided to them on that frequency.

We all know now that Madison Station WISC–TV operates on technically superior VHF channel 3 with the maximum height and power permissible under FCC standards. As such, it provides an effective wide coverage of quality TV reception that extends as far as 80 miles from Madison. This is the only regular and reliable TV service of any kind received by many tens of thousands of people of my constituency living from 35 to 80 miles from Madison, who are beyond the effective reach of Madison UHF or any other outside VHF station. For other tens of thousands in these same areas who can now receive one other regular and reliable TV service (from an outside VHF station), Madison channel 3 service provides one of their only two regular and reliable

TV services. For all of these people, Madison channel 3 furnishes their only tie, through this modern electronic marvel of television, to their State capital of Madison, which city is also the commercial hub of most of this area.

These facts have been shown and reconfirmed by my own personal experiences at home and extensive travels throughout the entire area of my congressional district. This past summer I visited the 120 communities with post offices in the district and others, to speak with countless of my constituents on matters of interest, particularly the proposed channel 3 deletion. This clearly demonstrated that these many people rely heavily upon Madison channel 3 for their usable TV service. Madison UHF's, whether because of inherent technical limitations or terrain or distance factors, simply do not provide much of this outlying area with regular and reliable service. This is true even when the residents attempt to obtain it by expensive special antenna installations. Thus, the people of these outlying areas receive substantially less TV service than do their friends and neighbors in and closer to the city of Madison where the local UHF's do provide effective coverage and a choice of services.

This factor of widespread dependence on Madison channel 3 is alone a most compelling basis for the Commission to deny the proposed deletion-deintermixture and to reaffirm completely the existing allocation. The Commission's basic allocation decision in its 1952 Sixth Report and Order makes clear that it originally allocated channel 3 at Madison precisely in order to serve as the area's wide-coverage facility to outlying farm and rural areas in the way that the local UHF's could not. Every reason remains for the Commission to retain the present allocation for this very same purpose.

The converse of these facts is that extensive loss of needed service would be among the heavy costs incurred on deletion or any reallocation of Madison channel 3 and its full coverage capacities. This loss would not only be technical in nature in eliminating the existence of the VHF signal per se. Just as important is the nature of the service to be lost, namely, station WISC–TV's valuable programing now being provided on that channel. Here again I speak from personal knowledge as a viewer of Madison channel 3 in my own home and also what I have learned from my extensive inquiries of my constituents, friends, and neighbors in this area. This programing matter is much more than the channel 3 station's fine service as an effective disseminating medium for presentation as the local CBS network affiliate of a full schedule of national programs of news, information, culture, education, and entertainment, *to an area often otherwise without such national programing.* As important as that factor may be, it is by no means the sum total of the channel 3 station's important programing role. I specifically refer also (again from personal knowledge and inquiry) to WISC–TV's continuingly rich schedule over the years of local public service programs. The station has served as an excellent (and otherwise unavailable) showcase for the State capital and the many beneficial resources available there, particularly so in the field of agriculture.

Madison is the hub of a market area that is one of the most important farm regions in the entire United States. In response to this, the channel 3 station offers what seems to be a uniquely extensive and valuable schedule of agricultural programing. Many farmers in the area have told me (and the Committee to Preserve Rural Television in the Madison Area also stresses) of the great utility of the station's daily 1-hour "Wisconsin Farm Hour" program. Every weekday for more than 5 years this program has brought area farmers and farm families regular and specially designed presentations of agricultural news, weather, interviews, demonstrations and homemaker information that is not only informative and entertaining on a personal basis, but is also of inestimable value to farm economy and activities.

I know of no equivalent schedule of farm programs, or anything approaching it, on any other station, certainly on none serving this area. This is not in any way to suggest that other Madison stations are lax in not serving this vast and specialized local farm area. It is simply that with their UHF coverage restricted to more urbanized areas of the Madison metropolitan market, they just do not cover the farm region with an effective signal and consequently do not attempt to serve it programingwise.

In all events, deletion or any reallocation of Madison channel 3 that impairs its wide-coverage program service, would be an incalculable loss to the entire area, both in service per se as well as in the loss of the uniquely valuable programing that the channel 3 station is enabled to provide over that frequency. If for any reason not now apparent the Commission may not be satisfied with such engineering data, the precise extent of this loss may be shown in greater

detail from submitted engineering data or from the Commission's own study of this area. But the fact that the threatened loss would have wide and most destructive consequences should alone be clear from the 32,000 signators of petitions to preserve Madison channel 3 which were signed in these areas alone and which are being filed in this proceeding by the voluntary Committee to Preserve Rural Television in the Madison Area. It is further shown by the many formal resolutions of the very counties, cities, and villages to be adversely affected which take a similar stand calling upon the Commission to deny the deletion of Madison channel 3. In this regard, the Commission's Madison proposal seems doubly unfortunate and ironic in that while no action whatever is contemplated to effect service to the millions of people in the major metropolitan areas who receive as many as 4 to 10 fully usable TV signals, the Commission here proposes to delete the only or primary regular or reliable TV service that can be received and enjoyed by large numbers of people in the Madison area.

Because my close interest in the Madison deintermixture proceeding has been generated by the strong adverse reactions of my entire constituency to the Commission's proposal, I have sought to explore in depth this matter of possible public interest justification for this destructive proposal. In so doing, I have examined the Commission's notices in these proceedings, its prior statements of policy on the matter of "selective deintermixture" in general, as well as possible Madison deintermixture in particular, and I have inquired into the Commission's prior allocations decisions in Madison as well as elsewhere where similar matters were taken up. I must candidly state that I have found nothing in any of these documents in the way of any effective jusitfication whatever for the contemplated Madison reallocation. In fact, all of the statements of policy, the prior FCC decisions, and its findings of fact supporting them would overwhelmingly seem to foreclose any Madison deintermixture now. They further clearly seem to impose a particularly heavy burden on the Commisison to justify even again reopening for consideration the matter of Madison allocations and infinitely more so any possible final decision to delete that chanel.

There has been no showing—and, to my knowledge the Commission has not indicated in any way—how Madison deintermixture could assist in any significant manner whatever in solving what it considers to be the VHF–UHF allocations problems that may be faced elsewhere in the United States. Certainly none seems apparent from any study of the Madison market. Deintermixture there would only disturb local allocations and service without materially assisting the further development of UHF stations, or UHF set distribution, or advertiser use of UHF in any of the major metropolitan markets where these factors may be significant. On the local Madison level no reason has been shown to warrant disturbing the existing situation where local VHF and UHF stations have operated together since 1956 in the very "intermixed" manner as the Commission has projected them.

As to "selective deintermixture" in general, the further proposed Commission use of this technique is difficult to understand in view of the Commission's outright rejection of it in the series of allocations reports in 1959 and 1960 to the Senate Committee on Interstate and Foreign Commerce. Given the Commission's strong thesis then, that this technique was meaningless and ineffectual to overall allocations problems, the factors and conclusions cited by it are equally, if not more, compelling today. This is particularly true in view of what would seem the conjectural nature of all of the Commission's rulemaking inquiry into overall allocations matters in Docket 14229. Nothing is yet fixed and certain, and for all that is known, no significant allocations changes may ever be adopted. In this light, the limited selective deintermixture contemplated by the Commission in Madison and a few other cities would seem a small, finite straw in a bushel of uncertainties and imponderables. And a very costly straw, at that.

I here also have in mind the repeated prior Commission decisions on this very same Madison question, most recently in 1957 on a full rulemaking record, to deny Madison deintermixture and reaffirm the established allocation. The facts and conclusions reached and relied upon by the Commission on these many prior occasions are certainly just as compelling today, if not more so. Even assuming no fixed principle of star decisis in administrative proceedings, it is quite difficult to understand the Commission's failure to set this matter finally at rest after repeated consideration and consistent denials. This not merely said from the standpoint of the private rights of any particular party (although the assurance of everyone being able to rely on administrative decisions should not cavalierly be disregarded), but more importantly from the aspect of the adverse effects on public confidence towards Government processes when ostensibly final ad-

ministrative results are repeatedly reached only to be cast aside shortly thereafter to repeat and re-raise the public anxiety. In light thereof, I do not believe that the Commission has sustained the heavy burden to indicate how and why again it has even opened this matter for consideration—and a fortiori how it can possibly now delete Madison channel 3 with its far-reaching and destructive consequences.

There are other compelling reasons which would seem to bar any Commission decision now to delete Madison channel 3. I believe that the compelling facts and past circumstances now require an immediate denial of the proposal but, even assuming not, then at least the Commission should not make any final determination until (1) it completes its UHF experimental program in New York City; and until (2) it determines finally and fully the matter of the nationwide distribution of all-channel receivers, as the result of or apart from the pending legislation now urged by it as part of its overall review of general allocations matters in Docket 14229; and (3) until Congress has held the hearings now scheduled on allocations matters as related to the Commission's proposed program of "selective deintermixture."

As to the New York UHF experiment, I have already made my position clear (in a statement on the floor of the House and in a letter to the Honorable Oren Harris, chairman of the House Interstate and Foreign Commerce Committee) concerning what I believe to have been the Commission's expressed position in obtaining the $2 million congressional appropriation for it. Copies of that statement and letter are attached herein and made a part hereof so that they need not be repeated here. If, as this record seems to make clear, the Commission received the $2 million appropriation to explore UHF's fundamental technical effectiveness and capacity, particularly in rough and uneven terrain such as found throughout much of the Madison area, then the Commission certainly cannot rationally act to delete Madison channel 3 now until it is fully assured from its experimental program that UHF is capable of being an effective replacement service for VHF. (Even then, however, it is difficult to see how UHF could in any event replace VHF in Madison in view of the recognized coverage limitations of UHF in this area. Certainly smaller towns, such as my home of Richland Center, cannot reasonably be expected or relied on to take advantage of Commission "paper" allocations to support extremely expensive TV stations just to fill in the outlying areas losing service from the deintermixture of existing VHF facilities in the major city of the market.)

On the other hand, if as some have suggested, the New York experiment is being conducted for another purpose and only to test UHF capabilities in a large "canyonlike" city,[1] then it would seem that the Commission can only rely on existing technical data in Madison already demonstrating vast VHF predominance in that area which nothing in the New York experiment could alter. In either event, there would be no supportable basis to deintermix Madison now.

Similar reasoning requires that if Madison deintermixture is not immediately denied, there should certainly be no Commission action on it until the other matter of achieving widespread UHF receiver distribution—whether by legislation or by play of market forces—is effectively resolved. It is clear that the Commission in reaffirming its nationwide allocations plan, and strongly supporting the all-channel receiver legislation, is now fully committed to a predominantly intermixed TV system in which VHF and UHF stations and service would operate side by side in almost all American cities.[2] Significantly, this is the precise situation already obtaining in Madison where intermixed facilities serve the Madison metropolitan area that already has complete UHF set capabilities. Therefore, the Madison situation is wholly consistent with the primary Commission allocations principle at the present time so that now, particularly, there is no reason for the proposed inconsistent and destructive Madison reallocation.

Indeed, in the present state of television development and the Commission's position, *there does not seem to be any possible situation* that could justify the discriminatory action of the limited selective deintermixture contemplated for

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[1] If so, however, it would seem—as suggested by members of the Subcommittee on Appropriations—that the Commission could have utilized existing Pittsburgh UHF facilities for the identical UHF experimental study at considerable savings to American taxpayers of more than $1 million.

[2] For this reason I, like so many of my fellow Congressmen, will support receiver legislation of this nature only if it is expressly conditioned upon the Commission's not compulsory deintermixing any existing VHF station and forcing its shift to the higher UHF band.

Madison. Should the Commission find from its experiences in these two areas of New York study and UHF receivers, that it cannot expect or rely on UHF for any significant role in future TV development, then it would inevitably require greater reliance on VHF for service. With it would come equally compelling reasons not to disturb the important Madison Channel 3 allocation.

I close with a few references to the voluntary Committee to Preserve Rural Television in the Madison, Wisconsin, Area which was spontaneously formed by a number of my constituents anxiously concerned as to the threatened loss of their vital Madison channel 3 service. They have worked hard and given freely of their time and efforts to bring their story to the Commission's attention so as to achieve a record that will permit of no other conclusion than denial of the proposed Madison deintermixture. Although I am not a formal member of the organization, I have been privileged to work with it in this matter, to act on occasion as its spokesman, and to offer to it my support on behalf of the common goal for which we have worked.

The 32,000 signatures in the "white" and "grey" areas around Madison which this voluntary organization has obtained in a short time, despite obvious limitations of time, experience and funds, are but one striking demonstration of the compelling grass-roots movement that has spontaneously sprung up in this entire area in opposition to the deintermixture proposal. As the local committee has indicated, its stated position and the signed petitions are closely representative of almost the entire body of citizens in this vast area. I share the local committee's belief that without such limitations, it could have obtained and furnished to the FCC the signatures of almost all of the men, women and children—every one of the tens of thousands of regular TV viewers—in the area. The local committee has done an excellent and public-spirited job in bringing the compelling strength of the informed public opinion in the area to the attention of the Federal Communications Commission and to their elected representatives.

As the duly elected Representative of Wisconsin's 3d Congressional District, for all my constituents and personally for myself as a resident and TV consumer of this area, I call upon the Commission for the compelling reasons stated above, to reaffirm again the long-established and vital allocation of Madison channel 3 to southcentral Wisconsin, and in so doing to deny again the deletion or any other reallocation, deintermixture or limitation of this uniquely valuable frequency and service.

I look forward to making a personal appearance before the Commission should it, as it has been requested, conduct an oral hearing or at least oral argument on this critical matter. I would also appreciate being kept advised of all significant Commission developments on it.

VERNON W. THOMSON,
United States Congressman,
Third District of Wisconsin.

CC: Commissioner Newton M. Minow, Chairman
Commissioner Frederick W. Ford
Commissioner Rosel H. Hyde
Commissioner Robert T. Bartley
Commissioner Robert E. Lee
Commissioner T. A. M. Craven
Commissioner John S. Cross
Hon. Oren Harris, Chairman, House Interstate and Foreign Commerce Committee, and
Members of the Subcommittee on Communications and Power

Before the Federal Communications Commission, Washington 25, D.C.

F.C.C. Docket No. 14239 and Docket No. 14229 (insofar as it affects Madison Channel 3)

IN THE MATTER OF DEINTERMIXTURE OF MADISON, WISCONSIN

COMMENTS OPPOSING REALLOCATION OF MADISON CHANNEL 3 BY THE COMMITTEE TO PRESERVE RURAL TELEVISION IN THE MADISON, WISCONSIN, AREA

The Committee to Preserve Rural Television in the Madison, Wisconsin, Area herewith submits its comments to the Federal Communications Commission in

regard to F.C.C. Docket No. 14239, urging the Commission to preserve the present (commercial) allocation of Madison channel 3 and to deny the proposed deletion or any reallocation of that channel. The committee firmly believes that the preservation of the present allocation of Madison channel 3 is required in the best interests of the tens of thousands of Wisconsin citizens who depend solely on Madison channel 3 for their only regular and reliable television service and the many other thousands of Wisconsin residents who depend solely on Madison channel 3 as their sole link with their State capital and with a Wisconsin-oriented television channel.

The Committee to Preserve Rural Television in the Madison, Wisconsin, Area was spontaneously formed by a voluntary group of private individuals in Muscoda, Wisconsin on August 10, 1961. It was formed as a result of discussions on the local level generated by newspaper articles on the possible deintermixture of television in the Madison area. These individuals realized that the loss of Madison channel 3 would too often deprive them, their families, their friends and neighbors and their businesses of the only regular and reliable television service they now enjoy or at least of their most important service from their State capital and Wisconsin voice. We also had knowledge of a similar committee of local citizens which was active in 1956 in a prior FCC Madison deintermixture proceeding which we believe was instrumental in causing the FCC then to deny such reallocation and to then reaffirm again the Madison channel 3 allocation. With the urgency of the current problem in mind, the present Committee was formed to oppose any reallocation of Madison channel 3 and to do everything it could to bring the vital interests of the area's citizens to the attention of the Federal Communications Commission as well as to their elected representatives so that the proposed reallocation would not be ordered. To this end, we also undertook to participate in FCC proceedings on the matter and to take such other necessary steps as might be indicated to achieve our goal of final reaffirmation of Madison channel 3.

A formal organizational meeting was held in Muscoda on August 10, 1961. At this meeting the following officers were elected: C. J. Victoria, (an oil distributor) Muscoda, chairman, James Victor, (of the Grant County Welfare Department) Lancaster, vice chairman, Mel Olson (shopkeeper) Boscobel, treasurer, and James N. Azim, Jr., (high school teacher) Muscoda, secretary. The committee felt that all of the citizens of Southwestern Wisconsin would be in complete sympathy with its objectives and activities. (Subsequent events have fully borne out this anticipation.) Accordingly, it was decided to circulate petitions throughout Southwestern Wisconsin for signature by interested local residents asking that the Federal Communications Commission preserve the present allocation of Madison channel 3 and to deny the proposed deletion. The petitions were of two basic types: most of them were circulated and signed in the "white" areas where Madison channel 3 is the only regular and reliable TV service of any kind available. The others were circulated and signed in "grey" areas where Madison channel 3 provides one of the two such regularly usable TV services as well as the only TV link to the State capital, if not the only Wisconsin-oriented station. A copy of each type of petition is attached.

The committee's officers first circulated petitions at the Grant County Fair at Lancaster. The local response to our efforts was overwhelming. Over 5,000 signers were obtained. Encouraged by this initial enthusiasm for our objectives, the committee sent volunteer representatives to other county fairs in Southwestern Wisconsin. Again we found a genuine grass roots concern over the possible reallocation of Madison channel 3.

The committee's activities branched out to include the following counties in southwestern and central Wisconsin: Adams, Columbia, Crawford, Grant, Green, Green Lake, Iowa, Juneau, Lafayette, Marquette, Richland, Sauk, Vernon, and Waushara. Individuals from each of these counties were contacted to serve on the committee. More than one hundred individuals actively participated in the committee's work. They served voluntarily and gave fully and freely of their time on behalf of the Committee because they were greatly concerned about the proposal to deintermix the Madison area with its most destructive effects upon their TV service.

The individuals serving on the committee represent a typical cross section of the citizens, communities and activities of central and southwestern Wisconsin. Representative of those serving on the committee are the following individuals together with a listing of their activties.

Mrs. Gerald Annear, Blue River, Wisconsin (housewife).

Mrs. Anne Marie Collins, Richland Center, Wisconsin (school teacher).

Donald L. Hollman, Friendship, Wisconsin (attorney).
Carl Hutchinson, Gays Mills, Wisconsin (barber).
Al Winters, Prairie du Chien, Wisconsin (merchant).
John H. Kramer, Fennimore, Wisconsin (attorney).
E. R. Barden, Platteville, Wisconsin (farmer).
Joseph Taugner, Berlin, Wisconsin (printer).
John Petrus, Highland, Wisconsin (attorney).
Edgar Obma, Dodgeville, Wisconsin (photographer).
Thomas J. Curran, Mauston, Wisconsin (attorney).
Andrew Wiseheart, Wonewoc, Wisconsin (farmer).
Jerry A. Edgar, Belmont, Wisconsin (attorney).
Norris Haffele, Shullsburg, Wisconsin (farmer).
John A. Konant, Westfield, Wisconsin (attorney).
Leonard Harms, Reedsburg, Wisconsin (merchant).
Mrs. Chris Clossey, Reedsburg, Wisconsin (housewife).
Kenneth Hutson, Viroqua, Wisconsin (agricultural teacher).
Walter Buros, Westby, Wisconsin (clerk of the circuit court).
Earl Kileen, Wautoma, Wisconsin (attorney).
Dr. C. H. Andrews, Platteville, Wisconsin (physician).
Earl Johnson, Saxtonville, Wisconsin (farmer).
Mrs. A. Wilcox, Wautoma, Wisconsin (housewife).
Elgie Hicks, Gotham, Wisconsin (laborer).
Adam P. Massari, La Valle, Wisconsin (restaurant owner).
Jack Gray, Wisconsin Dells, Wisconsin (staff of Chamber of Commerce).
Frank Stafford, Boaz, Wisconsin (high school teacher).
Vincent Lynch, Avoca, Wisconsin (merchant).
Gordon Roseleip, Darlington, Wisconsin (merchant).

Almost 32,000 signatures from local residents in the areas who would be harmed by the deletion of channel 3 have been obtained on the petitions circulated by members of the committee. To the best of our knowledge and belief, all of these petitions and signatures are valid and authentic and do accurately represent the informed views of those signing as to their position against any reallocation of Madison channel 3. The original copies of these petitions are being filed with the original of these committee comments so that they may become an official part of the Commission's files. No copies (up to 15) are being filed because to do so would seem to burden the Commission's files and so be an unwarranted expense. But we urge the Commission and interested parties to examine the original copies in order to get a clear idea of the extent and vigor of public opinion supporting the present allocation of Madison channel 3. Many individuals have also written to the Committee or its officers asking for petitions to circulate. Others had drafted petitions of their own and circulated them.

In addition to the circulation of petitions, the Committee undertook a program of public information to advise the citizens of central and southwestern Wisconsin of the Commission's deintermixture proposal and sought to obtain a demonstration of their feelings on it in line with the Commission's call for comments from interested persons. Obviously, those actually to be adversely affected by an administrative proposal are those most interested in it. Many city councils, village boards, county boards, and organizations passed resolutions addressed to the Federal Communications Commission, as well as their elected representatives, asking that Madison channel 3 be preserved in its existing and long-established form and not be deintermixed or reallocated in any way. A typical resolution reads as follows:

"RESOLUTION NO. 32

"The Marquette County Board of Supervisors duly assembled do ordain as follows:

"Whereas there is now a movement to change channel 3 at Madison, Wisconsin, from a VHF to a UHF station; and

"Whereas at the present channel 3 as a VHF station is one of the best and in many instances in our county the only good television reception that can be obtained by the residents of our county; and

"Whereas if channel 3 is changed from VHF to a UHF station it will be to the general detriment of all the people of Marquette County and in many cases end the practicability of television: Now, therefore, be it

"*Resolved*, That the Supervisors of Marquette County do respectfully request the Federal Communications Commission to leave channel 3 at Madison, Wis-

consin, as a VHF station for the general benefit and welfare of all the people of Marquette County as well as all the other areas affected by channel 3 reception and that the clerk is further authorized to send a copy of this resolution to Melvin Laird, our Member of Congress, Senators William Proximire, and Alexander Wiley, Governor Nelson and to the Federal Communications Commission.

"Dated this 16th day of November, 1961.

"Introduced by Walter Reetz and John F. Long.

"STATE OF WISCONSIN }
"*County of Marquette*} ss.

"I, Marcella Neilson, county clerk in and for Marquette County, Wisconsin, do hereby certify that the above resolution is a true and correct copy of a resolution passed unanimously by the Marquette County Board of Supervisors at their meeting held at the Courthouse in the City of Montello, on November 16, 1961.

"MARCELLA NEILSON, *County Clerk*".

[SEAL]

Expressions of support for the preservation of Madison channel 3 have been received by this committee from the following listing of governmental bodies and organizations. Many have already been filed directly with the Federal Communications Commission.

LIST OF RESOLUTIONS (AS OF 2/1/62)

Legislature of the State of Wisconsin

The 13 Wisconsin Counties of:

Adams	Iowa	Sauk
Columbia	Juneau	Vernon
Crawford	Lafayette	Waushara
Grant	Marquette	
Green	Richland	

The 23 Wisconsin cities of:

Baraboo	Janesville	Portage
Berlin	Lancaster	Prairie du Chien
Cuba City	Mauston	Reedsburg
Dodgeville	Mineral Point	Shullsburg
Edgerton	Monroe	Viroqua
Eiroy	Montello	Wautoma
Fennimore	New Lisbon	Wisconsin Dells
Hillsboro	Platteville	

The 2 Wisconsin towns of: Colburn and Rome.

The 33 Wisconsin villages of:

Argyle	Friesland	Oxford
Avoca	Hancock	Potosi
Barnewald	Highland	Prairie du Sac
Belmont	Hollandaie	Rewey
Benton	Ironton	Rock Springs
Blue River	Kendall	Spring Green
Cambria	LaFarge	Westfield
Camp Douglas	LaValle	Wonewoc
Cassville	Livingston	Wyocena
Darien	Monticello	Yuba
Dickeyville	Muscoda	
Footeville	Necedah	

In the aggregate, these formal resolutions to the present time have come from a total of 13 counties, 23 cities, 2 towns, and 34 villages. The counties alone have a combined population (1960 census) of 289,000 people.

This committee firmly believes that the expressions of support in the form of resolutions and petitions for the preservation of Madison channel 3 represent the nearly unanimous opinion of the third of a million people who would be most adversely affected by the removal or any reallocation of Madison channel 3. For most, deletion or any reallocation of Madison channel 3 would mean the

loss of their *only regular and reliable TV service* they can now enjoy; for many others it would mean the loss of what is only their second or single choice of TV program services. For all, it would mean the destruction of their only TV link with their State capital of Madison as well as of the most valuable program service which Station WISC–TV now provides with its maximum facilities to the vast farm and rural areas around Madison. The committee believes that except for obvious limitations of its time, efforts and funds, that similar expression of opinion could have been obtained from everyone in these areas of the Madison channel 3 coverage who would be so adversely affected in the same way by the proposed reallocation. However compelling the submitted petitions and resolutions are, the committee believes that they are representative of the overall strong feelings found throughout this entire area rather than a limited expression of those feelings by some citizens.

Madison, Wisconsin received its first TV service from its local UHF stations in 1953. While the UHF's have provided effective service to the city of Madison itself and to its immediately surrounding areas, these UHF operations have meant little or nothing to the tens of thousands of Wisconsin citizens in the outlying Madison area who do not receive regular and reliable service from these Madison UHF's due to local terrain or distance factors. Whatever the reasons or combination of them, these many people live beyond the effective range of Madison UHF and of any other outside TV station, VHF or UHF. This is so even with the use by many of elaborate and expensive outside antennas trying to pull in these outside signals. It was not until 1956 when WISC-TV came on the air in Madison on channel 3 that the Madison area obtained and could enjoy the widespread and perfect reception from its first VHF facility which they had waited for over the 8 years since applications for it were first filed in 1948. With it for the first time many, many, residents of these areas who before had been unable to obtain any usable TV signals, were now able to enjoy television on a regular and reliable basis. These people, who now are fully and effectively served by at least this one service, have come to depend upon Madison channel 3 for its great news, informational, cultural and entertainment values. This is particularly important in farm and rural areas where there is not the regular, day-to-day access to this and many other sources of such news, information, culture and entertainment as people in large urban areas generally enjoy. To deprive these Wisconsin people of this vital TV service they now at last enjoy and need so badly would be a grave injustice.

Madison channel 3 is the only television channel that most people of this area can receive on a regular and reliable basis. For this reason, and since Madison UHF cannot provide even a satisfactory service to these areas, the vast majority of television receivers in these areas are equipped to receive only a VHF signal. Similarly the vast majority of television antennas can pick up only a VHF signal. The cost of converting television receiving sets to obtain UHF service, together with the cost of erecting UHF antennas, would place a great and wholly unwarranted financial burden on the people of this area. Even worse, such compulsory and unnecessary expenditures would not bring most of them any usable TV service since the Madison UHF's signals simply do not effectively serve these areas due to the terrain and/or distance factors referred to above.

Madison channel 3 is the only direct (and TV) link with the State capital at Madison that these hundreds of thousands of Wisconsin citizens have. This access to their State capital is of particular importance insofar as state and area news and activities is concerned.

Those engaged in agricultural pursuits make up the largest percentage of the people of the area surrounding Madison that cannot obtain a dependable UHF signal. The excellent programing of Madison Channel 3 Station takes into consideration their large numbers of farm and rural viewers. WISC–TV is the only State television station to program a *daily hour long program devoted to the interests of farmers.* This program consists of farm market reports, weather reports, farm news, farm household activities and other matters of interest to rural viewers. It is uniquely beneficial to the many farmers and farm families in the area who now need, use, and rely on this special programing in their personal lives and farm activities. A grave injustice would be perpetrated against those engaged in agricultural pursuits if they were to be deprived of the informational programing provided by Madison channel 3 that would be lost on any reallocation of that frequency.

The consistently high-quality programing of Madison channel 3 (in areas other than farm presentations) also commends it to the large viewing audience it now enjoys. These people need this channel if they are to continue to enjoy the many benefits—informational-cultural-educational-news and entertainment—which tlevision brings to their fellow-Americans all over the United States.

To deprive these many people in these local areas of their only or primary TV service (and when others in many urban areas get as many as 4 to 7 or more perfect TV services) would be a gross discrimination against them. Because most Americans enjoy multiple excellent TV services, it may be difficult for the FCC to conceive of the heavy and exclusive dependence throughout this area on Madison channel 3. But it is an obvious and compelling fact.

For all the above reasons, supported by almost 32,000 signatures of local citizens in the area which are appended, together with the numerous resolutions adopted by county boards, city councils, the Legislature of the State of Wisconsin, and various other State organizations, also filed with this document or already on file at the Federal Communications Commission, the Committee to Preserve Rural Television in the Madison, Wisconsin Area, humbly calls upon the Commission to preserve the present Madison channel 3 service by maintaining unchanged the present allocation of channel 3 in Madison on a permanent basis and to deny again the proposed reallocation of that frequency. We are confident that the Commission so advised will recognize our position and act in the public interest in response to it.

COMMITTEE TO PRESERVE RURAL TELEVISION
IN THE MADISON, WISCONSIN AREA,
By JAMES N. AZIM, Jr.,
Its Secretary.

MUSCODA, WISCONSIN, *February 8, 1962.*

(Whereupon, at 8:10 p.m., the committee recessed, subject to the call of the Chair.)

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