VOLUME II—PART 3

THE COMMUNICATIONS ACT OF 1979

HEARINGS

BEFORE THE

SUBCOMMITTEE ON COMMUNICATIONS

OF THE

COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE

HOUSE OF REPRESENTATIVES

NINETY-SIXTH CONGRESS

FIRST SESSION

ON

H.R. 3333

TITLE IV (PARTS A AND B)

SPECTRUM USE AND LICENSING—GENERAL PROVISIONS AND LAND MOBILE AND OTHER RADIO SERVICES

MAY 14, 15, 16, 17, 22, 23, 24, JUNE 5, 6, AND 7, 1979

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THE COMMUNICATIONS ACT OF 1979

WEDNESDAY, JUNE 6, 1979

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

The subcommittee met, pursuant to notice, at 2 p.m., in room 2123, Rayburn House Office Building, Hon. Ronald M. Mottl, presiding (Hon. Lionel Van Deerlin, chairman).

Mr. MOTTL. The subcommittee will now come to order. We are very fortunate this afternoon to hear a distinguished panel comprised of Carlos Roberts, Bureau Chief, Private Radio Bureau, Federal Communications Commission; Mr. Paul Bortz, Deputy Assistant Secretary, National Telecommunications Information Administration; Mr. Charles M. Meehan, Land Mobile Communications Council; Mr. Don Franco, president, Microband Corp. of America; and Mr. Richard E. Gray, regulatory matters manager, General Telephone & Electronics Corp.

The hearings will basically be on the spectrum use, parts A and B and the three questions posed to the panel to be discussed before the subcommittee.

The first question is, Are there current spectrum management problems which H.R. 3333 does not solve?

Two, would the proposed spectrum use fee be workable and would it improve spectrum management?

Three, can modern technology provide new approaches to spectrum management? If so, does H.R. 3333 allow the Commission to use such new approaches?

We will start with Mr. Carlos Roberts.

STATEMENTS OF CARLOS V. ROBERTS, CHIEF, SAFETY AND SPECIAL RADIO SERVICES BUREAU, FEDERAL COMMUNICATIONS COMMISSION; PAUL I. BORTZ, DEPUTY ASSISTANT SECRETARY FOR COMMUNICATIONS AND INFORMATION, NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION, DEPARTMENT OF COMMERCE; CHARLES M. MEEHAN, ON BEHALF OF LAND MOBILE COMMUNICATIONS COUNCIL AND UTILITIES TELECOMMUNICATIONS COUNCIL; DON FRANCO, PRESIDENT, MICROBAND CORP. OF AMERICA; AND RICHARD E. GRAY, REGULATORY MATTERS MANAGER, GENERAL TELEPHONE & ELECTRONICS CORP.

Mr. ROBERTS. Thank you.

Mr. Chairman and members of the subcommittee, it is a pleasure to have the opportunity to appear before you and offer my

thoughts on the spectrum management provisions of H.R. 3333. I want to emphasize at the outset that I am speaking for myself and not for the Commission. The views I express are my own.

The one proposal in H.R. 3333 that has generated the most controversy and confusion and which also happens to be among the most important and innovative aspects of the bill is the authorization of spectrum fees. Because of the important role that fees and other economic tools can play in any scheme for improving the use and management of the radio spectrum, I would like to focus my oral comments today on the general subject of spectrum economics. I will submit written comments on the other aspects of the bill at a later date.

Let me begin by discussing why we need to apply economics in our spectrum management processes. Our present regulatory structure is based substantially on decisions made on the basis of subjective judgment rather than on extensive factual information.

This is because it is extremely difficult to obtain accurate data on an applicant's need for use of the spectrum, on the value of the spectrum to present users, on the costs associated with reallocation, on the costs of utilizing more efficient technology and many other areas. Because of this lack of critical data, decisions made through the political and regulatory processes sometimes do not result in the most valuable use of the spectrum.

Some of the types of decisions I am referring to include: When should reallocation occur within a general class of service? For example, in the land mobile services, should railroads have more frequencies than farmers? Should manufacturers have the same number of channels as power companies?

When should reallocation occur between services? For example, when does television broadcasting have too much spectrum and land mobile not enough or vice versa? When should a totally new class of radio service be given spectrum and where should it come from?

What should be the required standard for technical efficiency in spectrum consuming equipment? For example, when if at all, should efficient spectrum usage techniques such as trunking and single sideband be mandated?

These few examples illustrate some of the difficult decisions that must continually be made in the process of spectrum management. I believe the goal of spectrum management should be to put spectrum to its most valuable use and that use should be determined in the same way we allocate most of our other scarce natural resources, through the application of economics.

Let me now briefly explore two types of economic tools that hold promise for improving the manner in which spectrum is utilized.

Spectrum use fees based on scarcity are one possible option for achieving more efficient use of the spectrum. Unfortunately the fee structure provided for land mobile users in H.R. 3333 suffers from a serious structural deficiency. Since the maximum fee that a land mobile user can be assessed is tied to the revenues of the smallest local UHF TV broadcaster, there exists a critical relationship that can limit the effectiveness of any fee for land mobile operations.

For example, using the formula proposed in the bill, the land mobile fee caps based on spectrum scarcity for our three largest

cities would range from $0.48 to $4.42. Clearly fees at this level would have little if any effect on improving spectrum management.

A possible solution the subcommittee may wish to consider would be to sever the link between UHF television fees and land mobile fees and have each category float separately. I personally do not believe fees for land mobile would be very high even without a tie-in to television fees but any such fears could be allayed through the provision in the bill of an arbitrary dollar ceiling on the maximum fee amount.

Another type of economic tool that can be effectively used to improve spectrum management is the implementation of a marketplace where licenses to use the spectrum can be freely traded. To function effectively this proposal would require the following: (a) maximum loading limits would have to be set for shared land mobile channels; (b) free transferability of licenses among users of similar services would have to be assured; and (c) the elimination of block allocations and restrictive eligibility rules would have to be accomplished.

Fortunately, I believe that the provisions in H.R. 3333 are adequate to enable the Commission to implement a system for the free trading of licenses although obviously major changes in present FCC rules would be required.

Such a spectrum market would have the advantage of largely removing Government intervention in the frequency assignment process, and the resulting price signals would give a clear indication to the spectrum allocation authority as to the need for spectrum reallocation.

Let me sum up this quick review of economic tools for spectrum management by stating it is my firm conviction that only through the application of economic based techniques, such as those discussed above, that significant improvements in spectrum management can result. Unfortunately there does not appear to be any one technique that can be optimally applied to all bands and all radio services.

I would therefore recommend that H.R. 3333 be drafted in such a manner as to provide the Commission with maximum regulatory flexibility in implementing spectrum economic approaches. Specifically, the use of fees, auctions and marketplace mechanisms for frequency assignment and allocation should be permitted and encouraged in the legislation.

Again, it is only through the use of economic tools that I believe the goals of spectrum management can be achieved in our rapidly changing communications environment.

Mr. Chairman, this concludes my testimony. Thank you for the opportunity to appear before the subcommittee.

[Testimony resumes on p. 1481.]

[Supplemental statement of Mr. Roberts follows:]

SUPPLEMENTARY STATEMENT OF CARLOS V. ROBERTS, CHIEF

PRIVATE RADIO BUREAU

FEDERAL COMMUNICATIONS COMMISSION

Carlos V. Roberts, Chief of the Private Radio Bureau of the Federal Communications Commission, respectfully submits the following comments on H.R. 3333. These are in addition to the testimony that Mr. Roberts was privileged to present to the Subcommittee on June 6, 1979. As then, these comments reflect the views of Mr. Roberts, and not necessarily those of the Federal Communications Commission.

Title I -- General Provisions

Findings and Purpose

Sec. 101. I am in complete accord with the findings and purpose.

Sec. 102 (2). The definition of "broadcast" may be too vague. It could be interpreted to include CB.

Title III -- Telecommunications Carrier Regulation

Part A -- General Provisions

Declaration of Purpose

Sec. 311 (b). Regulation is limited to protection of consumers from dominant carriers. Regulation authority may also be needed to assure compliance with international services, (e.g., coastal stations in the Maritime Mobile Service.)

Part B -- General Authority of Commission

Jurisdiction

Sec. 321 (b)(1). There is some question in my mind as to what, if any, jurisdiction the states should have over mobile radio. Any state authority would be particularly troublesome in the multiple licensing (community repeaters) and 800 MHz SMRS areas. An explicit statement that all private mobile radio services are exempt from state regulation would be preferable here.

Location of Service Carriers

Sec. 334. I heartily support this section permitting any carrier to accept and deliver maritime and general telecommunications service for international transmission at any point within the United States.

Title IV -- Spectrum Use and Licensing

Part A -- General Provisions

Powers and Duties of the Commission

Sec. 413. I am in general agreement with the powers and duties of the Commission specified by Sec. 413 but I wish to offer two suggestions. In (a)(7), regarding conventions and treaties, it appears that this section gives the Commission broader authority than is intended, considering the duties and functions intended for NTA in Title VII. As presently set out, I believe there exists the possibility of unintentional and undesirable overlap of authority. The other is with

regard to the performance of television receiver characteristics. I concur with the need to regulate TV receivers; this could eventually make available more spectrum space for TV and other radio services utilization. Sec. 413 is silent on the subject of other kinds of receivers, however. Since the receiver is an essential part of any radio system operating in the private services, comprehensive management of the spectrum is made more difficult if there is no authority to regulate receiver performance. This is so because it is less costly to manufacture receivers that offer poor selectivity than those which are extremely selective. As a result of the deployment of receivers with poor selectivity, the Commission is often forced to assign transmitting frequencies with larger spacings between adjacent channels than current technology actually requires. This inefficient, indeed wasteful, use of the spectrum can be directly related to the Commission's inability to exercise control over receiver performance. I believe public interests would be better served if the Commission were given the authority to develop and enforce minimum standards of receiver performance.

Spectrum Resource Fee

Sec. 414. Please refer to my oral statement on this subject before the Subcommittee on June 6, 1979.

Applications

Sec. 415 (b). Coastal stations of the Maritime Mobile Service should be added to the list of stations requiring a public notice before being

granted a license.

Sec. 416 (c)(2). Since amateur stations are mentioned elsewhere in the Bill (e.g., 549 (d)), it would be consistent to include "amateur radio station" in Sec. 102.

Sec. 417. It would be expedient to have authority for the Commission to designate certain licenses to be granted upon the mailing of an application--for example; CB and non-compulsory fitted ship stations (recreational boats).

Revocation of Licenses; Cease and Desist Orders

Sec. 418 (d)(1)(A). Amendment would permit an interested party to file with the CRC "a petition to revoke any license granted by the Commission, under this title". The CRC would have to take action on such petitions "expeditiously", even though in many instances hearings would be required. Since there are approximately 15 million CB licenses, and a substantial percentage of holders at sometime or other probably have engaged in behavior warranting revocation, it may readily be seen that the CRC could be inundated with Sec. 418 petitions. Sec. 418 should be amended to exclude most or all of the stations licensed by the Private Radio Bureau.

Prohibition of Censorship

Sec. 422 prohibits censorship or regulation of transmission content by

the Commission. It is presumed that the legislative intent is aimed primarily at broadcasting, however land mobile and other radio services are included. This effectively also exempts from regulation the transmission of false distress or other improper messages. This is clearly beyond the intent of Congress. While the First Amendment basis for proposed Section 422 may be solid for the broadcast services, the Subcommittee may want to review the language of this Section with the Private Services in mind. Because these services presently depend almost exclusively on time sharing, the Commission must adopt rules that regulate the content of transmissions. Those that are considered non-essential should not be transmitted; routine messages must give way to emergency calls. There are a number of rules which limit the content of transmissions to matters directly related to the activity on which the licensee's eligibility is based. The present language of Section 422 is so broad that we may find ourselves unable to require the continued use of practices which result in the ability of multiple users to share the same channel efficiently. This could be an unfortunate development, and could impair the CRC's spectrum management capability.

Part B -- Land Mobile and Other Radio Services

Distress Signals and Communications

Sec. 434 in essence states that ships, when in distress, may use their radio equipment in any possible way to attract attention to receive assistance. There is nothing, however, in H.R. 3333 regarding the compulsory carrying of radio aboard ships. The Communications Act of 1934 contains a number of specific requirements for certain types of

passenger and cargo vessels to maintain radiotelephone/radiotelegraph installations (Title III, Parts II and III). 1934 wisdom has, over the years, insured the safety of life and property aboard marine vessels. While a desire to minimize some of the detail contained in this section is understandable, it is a very different thing to eliminate altogether the requirement that ships be radio-equipped. I suggest the inclusion of language mandating the compulsory installation aboard ships of radio equipment capable of transmitting distress or emergency messages. The Commission should be free to establish regulations to this effect, but I think Congress should also establish the requirement in unequivocal terms. Should the Subcommittee feel that the requirement for safety related equipment would be located inappropriately in the Communications Act, then legislation should be drafted giving regulatory responsibility and enforcement authority to the Department of Transportation (U.S. Coast Guard). This is a matter of vital importance and I recommend that the intent of Congress be clearly stated, so that governmental responsibilities with regard to marine radio will be apparent to all.

Title V -- Administrative and Judicial Procedures; Penalties

Part A -- Administrative Procedures

General Procedures

Sec. 511. I support the goal of completing rule making within a one-year and 90-day period but I do question the wisdom of the self-destruct mechanism of any rule making not completed within this time limit. The Administrative Procedures Act itself has built-in delays, and many

Commission rule making procedures, including frequency coordination, require coordination with other federal agencies, often resulting in delays for scheduled meetings. This means that much of the Commission rule making process depends upon actions over which the Commission has little or no control, and it therefore seems advisable to soften the wording of Sec. 511 to allow a longer rule making period when complex issues requiring coordination with other government agencies are involved.

Part C -- Penalties and Enforcement

Unauthorized Publication, Interception, or Use of Communications

Sec. 549. In paragraph (d), I suggest that the word "amateurs" be deleted and the words "amateur radio station" substituted therefor, and that a comma be inserted after the word "station." These amendments would resolve the problem encountered under Section 605 of the 1934 Act concerning the applicability of the privacy provisions in Section 605 to amateur stations. Another suggestion here regards enforcement monitoring. Commission enforcement monitoring capabilities most probably will never be adequate to allow proper enforcement of short range mobile communications. Therefore, third party monitoring by Commission designated Government agencies or specified facilities for use as evidence by the Commission, for enforcement purposes, should be authorized. For example, the Coast Guard has an extensive VHF network with which it monitors distress calls. Monitoring through this network could be instrumental in reducing the misuse of the maritime VHF band,

especially the distress frequency, Channel 16. Rule compliance could be significantly improved, with minimum additional costs, if the Congress were to authorize the Commission to utilize the products of monitoring by other federal agencies.

Title VII -- National Telecommunications Agency

I am in general agreement with the provisions of Title VII. Location of the entire allocation function in the NTA, an executive branch agency, does however cause some concern. I have given considerable thought to this matter and recognize the difficulties in our present system, wherein two agencies (FCC and NTIA) have allocation and assignment responsibilities, protecting their respective government or non-government allocations and each vying to get more from the other. The IRAC has done its best to ameliorate this dichotomy but it has not been enough. I believe that the entire allocation function should be located within a single entity in order to be truly objective in making allocations appropriate to both government and non-government uses. I will not attempt to define the nature of such an entity but I do believe it should not be a single-administrator type of agency, for the reasons presented by Chairman Ferris in earlier testimony. I believe the drawbacks of assigning the critical spectrum allocation function to a single-head executive branch agency would outweigh the advantages that would be gained by consolidating what is now a split responsibility. If the spectrum allocation functions cannot be performed by some type of collegial agency such as a commission, it would be preferable to continue the status quo rather than to run the very high risks of

misallocation and favoritism that would inure to a process controlled by a single-head agency.

Additional Suggestions

I would like to offer two additional suggestions which I believe would give the Commission desirable licensing flexibility along with better service to the public at less cost. The first suggestion is to include authority for the Commission to delegate station licensing authority to appropriate designated persons or entities. An example of a possible benefit under this suggested delegation is point-of-sale licensing. This could permit the issuing of licenses by equipment distributors at the time of purchase, thus avoiding current licensing delays.

A second suggestion would permit the Commission to issue blanket authorizations for the operation of certain classes of stations, CR for example, which, due to their low power and short range, remain entirely domestic. Together with this authority the Commission would need expedited revocation procedures. The advantage here, if we again consider CB as an example, would be that blanket authority could be given for operation in the CB Service, and the Commission could then concentrate action on abuses instead of licensing. Certainly, both of these suggestions, if considered for legislation, would need to be drafted carefully so as not to conflict with Article 18 of the ITU Radio Regulations.

Conclusion

I would like to thank the Subcommittee for the opportunity to present both oral and written statements for its consideration.

Mr. MOTTL. Thank you very much, Mr. Roberts.

All statements of the succeeding speakers will be inserted into the record without objection.

We will next hear from Mr. Paul Bortz, Deputy Assistant Secretary, National Telecommunications Information Administration.

STATEMENT OF PAUL I. BORTZ

Mr. BORTZ. I appreciate this opportunity to testify on the spectrum fees and land mobile and other radio services portions of your bill.

The executive branch still has this and other portions of the bill under study, so the views I present today represent those of NTIA and the Department of Commerce. I will submit the full testimony for the record and I would like to summarize three major points. [See p. 1484.]

The first concerns spectrum fee for broadcasting. The term "fee" has been used in a number of different ways. We look at it in terms of four categories in which people have used the term "fee." The first is fee to cover the cost of licensing which appears in much of the legislation. The second is to recover some portion of the scarcity value which is the principle your bill addresses. The third is the use of fees as a spectrum management tool which again your bill addresses and the fourth is the NTIA position that we have described earlier, the use of a fee in lieu of the public trustee concept.

Whenever we talk about "fee," I think we should look at it in terms of those four functions and try to determine what it accomplishes and what it does not accomplish in terms of those functions.

As I mentioned, your proposal uses scarcity value as the basis. NTIA has proposed that indeed the major reason for fee would be in lieu of the public trustee obligation. As we have stated before, we have noted that enforcement of the public trustee obligation has been inefficient and has entailed substantial first amendment costs.

As to the amount and the nature of the fee, I think only an auction or some similar technique could really estimate scarcity value. Clearly, this is infeasible because of the disruption it would cause for the broadcasting services. I think the judgment as to what fee is appropriate is basically a political judgment; that is, you are trying to come up with a fee which is not too disruptive and yet you want to make a significant contribution to the achievement of congressional goals in broadcasting which we now seek through the public trustee concept. Whether it is 1 percent of revenues or 2 percent or the sliding kind of scale which is embodied in your bill, I think you have to look at it from a number of different points regarding equity and disruption and we outline that in our formal testimony.

We therefore support the concept of fee in your bill but we note throughout the bill that it is based in large part on the use of a scarce spectrum resource. To that extent, then, we believe you should consider the form of the schedule which appears in S. 611.

Let me go on to spectrum fees for land mobile and other radio services. We believe that in the regulation of land mobile and other radio services that the proposed CRC should have maximum flexi-

bility to use economic techniques in spectrum assignment and allocation decisions; these views are very similar to those Carlos Roberts just expressed.

User charges, shadow pricing and auctions are all possible, but we do not see immediate application of these at all. These techniques are theoretical, and we do not know a lot about them in a practical situation. There would certainly have to be experimentation and many of these might not turn out to be feasible.

We suggest CRC be given the power to experiment; the authority should be there, but we do not anticipate this happening immediately.

If some of these would work, I think a clear pattern of spectrum value would emerge and any significant difference in value—for example, in adjacent parts of the band—would then be an argument, only one argument but an argument for reallocation among services.

A multipoint distribution system is perhaps a good example of a service in which really there are no noneconomic social concerns. Therefore it is one that would be quite suitable to the use of a technique such as auction.

In talking about MDS, we also commend your incorporation of section 436(a), which essentially says the Commission should if at all possible avoid the creation of monopolies in the allocation of services. The way MDS has been developed, has really created a monopoly and I think cellular telephone systems would result in a similar situation. We think your caution and general direction there is very important.

Linking the land mobile fees to the broadcast fees as you have done, I think, would preclude or might preclude any effective use for spectrum management purposes of the fees derived from this service. We appreciate the thrust of the provision that you have—that is, the payment of equivalent amounts per unit of spectrum used—which is the basis on which the link is established. However, it might not be a linear relationship at all.

We think if you can acknowledge that the broadcast fee really is imposed in lieu of the public trustee obligation, you will be able to separate the two approaches as regards fees: fees imposed on land mobile and other radio services would be for spectrum management purposes, while those derived from broadcast would be in lieu of the public trusteeship.

Our recommendation is that the relevant subsections of 414 which deals with the linkage be eliminated and that the Commission be given a clearer charter for the uses of economic techniques as presently given in section 436(b)(2). This essentially is a grandfathering kind of approach. We think this grandfathering approach could lead to some very awkward situations out in the field.

Let me touch on my final key point, which deals with jurisdictional uncertainties in the land mobile area particularly. Both the regulated operators, radio common carriers, and wire line common carriers, and the unregulated entities, such as shared private systems, exist in these services. Sometimes it is very hard to tell the difference between those services.

I think some systems require regulation. I think cellular is a system that has definite monopoly characteristics—high entry

costs, significant economies of scale and limited availability of spectrum.

We believe all intraexchange services, where regulated, should be under State regulation as opposed to the Federal preemption which is in your bill.

We do share your concern of unnecessary State regulation in these areas and we support the alternative put forth by Carlos Roberts just a few weeks ago to have your bill give the Commission the authority to determine whether, under certain conditions and for certain types of radio common carriers' services, there is no need for regulation.

We believe where regulation is appropriate, that regulation should be at a single level for all services providing intraexchange communications. I think, if not, we could get some real anomalies in having two layers of regulation for what is basically the same service using different technologies.

Let me just state two more points very briefly.

We believe the Commission should not regulate the performance characteristics of receivers beyond the regulation of spurious omissions. I described the last time I appeared in front of your committee on H.R. 13015 about the "tar baby" effect that can result from receiver performance regulation. We think the wide latitude given the Commission could be really disasterous and result in huge cost to the consumer.

We also want to state our very strong support for section 549 of your bill, which deals with unauthorized interception of communications. We suggest in the full testimony somewhat more rigorous standards for governing interception than is currently in section 549. These more rigorous standards are based on recent NTIA study of these particular issues.

I think in summary that this section of the bill is a clear improvement over what we have now and we look forward to its enactment.

[Testimony resumes on p. 1520.]

[Mr. Bortz' prepared statement follows:]

Statement of

Paul I. Bortz

Deputy Assistant Secretary

National Telecommunications and Information Administration

I. Introduction

Mr. Chairman, I appreciate this opportunity to appear before the Subcommittee and testify on H.R. 3333. The subject of these hearings today, spectrum use fees, land mobile and other radio services, focuses attention on the critical need for effective management of the valuable spectrum resource.

The Executive Branch still has this and other portions of the Bill under study, and it has not been feasible to coordinate with all the relevant agencies. Consequently, I will only be able to give you the views of NTIA and the Department of Commerce.

Historically, spectrum has been treated essentially as a "free" good. Whenever charges have been proposed for its use, the proposals have sparked considerable controversy as to what kinds of spectrum use fees the FCC can legally charge users.

We believe that it is time to face the important question: Can we afford to continue treating this valuable resource

as a "free" good or should we introduce economic principles into management of the "scarce" spectrum resource?

The "scarcity" we hear of today is, to a great extent, the result more of treating spectrum as a free good and as NTIA will more fully develop in our testimony on Title VII, the administrative procedures required by present law, than of a genuine scarcity of spectrum. For example, while block grant allocations are appropriate for certain services, we should, whenever feasible or appropriate, consider breaking down more rapidly the block allocation procedures--by which frequency bands or "blocks" are reserved exclusively for a specific service. A few improvements are observed in this area, but more is required. Most importantly, there are no particular financial incentives to use the spectrum efficiently. In fact, there is a strong counter-incentive to innovation in that a spectrum user can usually substitute the use of "free" spectrum for much of the complexity and cost of the more sophisticated efficient communications equipment.

We suggest therefore a guiding principle for spectrum management: to strive to allocate this valuable national resource along lines that reflect maximum economic and

technical efficiencies consistent with other national goals. We think that H.R. 3333 would serve that end far better than does the present statute.

II. Land Mobile and Other Radio Services

Land mobile and other radio services play a critical but often little appreciated role in our modern society. They include such important services as the various mobile categories--land, aeronautical, and maritime mobile--as well as the private microwave services, the Citizen's Band and amateur services, and navigation systems, and even radio astronomy, to name just a few.

These services are crucial to assuring the safety of life and property, for economic well-being, for promoting efficient transportation and management of resources and for allowing public access to radio for personal use. Many of those functions could not exist--or could only be performed at a much higher cost or with greatly reduced effectiveness--without the use of the radio spectrum. Moreover, the amount of spectrum allocated to a particular service is an important element in determining the cost and the quality of the service to the user.

We have already expressed our opinion that the use fee concept would be a worthwhile option. But there has been no experience in administering alternative economic techniques, or combinations thereof. Without considerable experience in using economic techniques in spectrum management decisions, we doubt that the CRC will be able to identify the preferred techniques. Congress should therefore give the CRC maximum flexibility to develop economic techniques for use in its spectrum assignment decisions. These techniques might include user charges, shadow pricing, auctions, etc. If Congress does allow the CRC to engage in spectrum management with the recommended flexibility, we intend to participate fully in the CRC's efforts to develop these economic techniques.

We believe that these efforts can improve spectrum management in several ways. For example, a technique such as auction may be appropriate in circumstances without non-economic social concerns, and will allow for a determination of the highest value of spectrum for particular uses. This process would serve both the interests of economic efficiency and equity. This, in turn, will foster more efficient, future allocation and reallocation decisions. For, if a clear pattern of <u>spectrum value</u> emerges, such as might happen with a spectrum auction, any significant

difference in the value of the spectrum from one service band to another would surely be an argument for reallocation. Present mechanisms to determine the relative needs of spectrum users within a class--or even the relative needs of classes of spectrum users--are demonstrably inadequate. We are not saying that the auction process for a fixed term assignment is the most desirable technique under all circumstances--only that its use in certain service should be thoroughly explored and be within the CRC's discretion, if found to be desirable.

As another example, there are certain aspects of relative spectrum property rights that are best left to spectrum users to resolve by private agreement, subject, of course, to the CRC's approval. One user might be able to improve his or her system's performance if a second user agreed to decrease transmitted power. If no third parties are adversely affected technically, a private agreement here would increase overall economic efficiency.

Another technique to be explored is subleasing. Here a user might sublease part or all of his or her license--in either the geographic, frequency, or time domains. This has precedent. For example, the "office music" suppliers use portions of FM radio frequencies and pay the radio station for carrying their signals.

In sum, short of a full and open market in spectrum-which we cannot advocate at this time-a number of possible approaches with varying degrees of market involvement are available to increase overall economic efficiency. A spectrum fee, determined by some administrative process, might also be a useful economic technique for making frequency assignment decisions, but it is not the only or the most effective marketplace force that might be applied to the management of the spectrum (e.g., many would argue that auctions would be more effective). The CRC thus should be allowed flexibility to employ economic techniques, such as described above, both in making spectrum assignments and after such assignments have been made. Thus, while we approve of Section 436(b)(2) insofar as it would allow some flexibility to the CRC, we believe that greater flexibility is needed (see page 10, infra).

III. Spectrum Fee for Broadcasting Services

In view of NTIA's prior testimony on commercial broadcasting, no extended discussion is needed. Whatever the merits of a fee for managing the spectrum in the broadcast area, such a fee is called for, in our view, in lieu of the public trustee obligation. As we have developed, enforcement

of that obligation has been ineffectual and has entailed considerable First Amendment costs. The revenue obtained from the spectrum fee could be used by Congress to more directly accomplish its goals in this area. We urged immediate substitution of the fee for program content regulation as to radio and its examination for television after a 10-year period in which the experience in radio and the deregulatory experiments could be evaluated.

As to the amount and nature of the broadcast fee, we pointed out that only an auction could establish value in these circumstances, but that auction was infeasible because of the great disruption that would occur. It follows that the judgment as to the appropriate fee is a political one-that is, to select a fee that is not too disruptive and yet also makes a significant contribution to the achievement of Congressional goals.

We therefore support the concept of the spectrum fee, as reflected in H.R.3333, assuming that the hearings do not establish that the schedule in Section 414 fails to meet the above guidelines. We note that this schedule is based, in large part, on "the scarcity value of the spectrum being assigned..." (Section 414(a)(2)). To that extent, we believe that the schedule in S. 611 merits consideration.

IV. Spectrum Management Provisions of H.R. 3333

"Findings and Purposes"

Title I soundly sets forth a general Congressional finding that regulation by the CRC is necessary "to the extent marketplace forces are deficient," and that the purpose of the Act is to regulate interstate and foreign telecommunications "to the extent that marketplace forces fail to protect the public interest" (Section 101 (a),(b)). This finding is properly restated in Section 411, containing the Congressional findings under Title IV--spectrum use and licensing--so as to dispel any doubts that marketplace forces are to be an essential tool in spectrum management, and regulation is to be resorted to only when the marketplace is proven insufficient.

Title IV recognizes that regulation of spectrum usage has the additional purpose of resource conservation. Section 411 also provides the principle underlying spectrum fees, to increase efficiency of spectrum usage. The Section 411 findings should be expanded to make it clear that the same principle underlies the CRC's employment of other economic techniques in its spectrum management decisions, such as bidding, leasing and license modification agreements.

Spectrum Fees for Land Mobile Radio Services

The fee schedules that are to be established for land mobile radio services may well be inappropriate, if their purpose is to promote efficient spectrum use. The Bill provides for spectrum fees in the land mobile radio services that would be tied to spectrum fees for UHF television broadcast licensees, with the latter fees based upon a statutory formula. We can appreciate the thrust of this provision--to have UHF broadcasters and land mobile radio licensees pay equivalent amounts per Hertz of the spectrum used. This appears to be aimed at notions of equity among various users. But there is another important purpose that should be taken into account--to promote efficient use of the spectrum. The fees established for the UHF spectrum might not necessarily be identical to those which would efficiently allocate the land mobile spectrum. The CRC should also have the flexibility to adopt a fee schedule that would promote the latter.

This poses a choice--to opt for the equitable linkage, thus stressing scarcity value, or to eliminate subsections (c)(1)(B)(ii) and (c)(2) of Section 414, so that the fee will be established by the CRC based on the spectrum efficiency standard. We favor the latter but recognize the difficult policy considerations in balance here.

Flexibility in Spectrum Management Techniques

We have set out the need for maximum flexibility to be afforded the CRC to experiment with and employ various economic techniques such as auctions and user charges in assigning spectrum. We are concerned that the Bill will not be construed to allow such maximum flexibility. Section 414(a) requires the CRC to assess spectrum fees on licensees based in large part on the "scarcity value" of the spectrum being assigned.[1] Section 413 (a)(3) requires the CRC to "study and provide for an efficient system for assignment of the electromagnetic frequency spectrum," and section 436(b)(2) certainly allows flexibility but only with respect to vacant frequencies in land mobile or other radio services. This latter provision will lead to awkward situations where land mobile licensees in the same area will be treated

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[1] Section 414(a)(2)(C) states that the Commission shall waive that portion of the fee representing the scarcity value of the spectrum if it determines that the license is required by a treaty or a provision of international law. The ITU Radio Regulations, which have the status of an international treaty, specifically require that all transmitters of member nations be licensed by their governments (Article 18, Provisions 725-734). An argument might be made that this would exempt all systems which use transmitters from the spectrum resource fee. We suggest that Section 414(a)(2)(C) or the legislative history be clarified to eliminate this possibility.

differently, depending on whether they operate on new or old frequencies. Most important, no provision expressly authorizes the CRC to experiment with and employ a wide range of economic techniques in all situations. We strongly recommend that express authorization to do so be included in Title IV. Also, section 417(d)(2) and 415(d)(1)(A)[2] should be revised to specifically note this express authorization ("subject to the provision of Section _____").

V. Other Specific Areas of Concerns

Over-regulation. Under the present Act, the FCC is unsure whether it has the clear authority not to regulate in many cases where the competitive marketplace might work very well. For example, the FCC has had considerable difficulty in the Land Mobile Radio (LMR) area in creating a new class of service providers--Specialized Mobile Radio (SMR) systems. The Commission's construction of the broad mandate to regulate common carrier activities along with its definition of common carrier activities has made for wide regulation in this area.

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[2] We construe Section 436(b)(2)(D)) as permitting the use of an employee board, as discussed in our commercial broadcasting testimony.

Section 322 of the Bill addresses the problem by providing the proposed CRC with broad powers to classify common carriers and thus to decide what carriers are subject to Title III regulation. We believe this flexibility should be carried over into the land mobile and other radio services, and believe the Act does so, with the broad exemption provision in Section 437. We strongly believe that competitive providers of common carrier-like services should not be regulated simply because of the definitional nature of the services offered. The key factor to be considered is the economic or social need for regulation. What purpose will it serve in the particular circumstances of the market in question and will a competitive marketplace, left to its own devices, serve those purposes?

Optional "Blanket" Licensing. Generally, the FCC believes it has a mandate to license all non-Federal users of the spectrum. It has decided that it is reasonable under this requirement not to regulate very low-powered emitters such as walkie-talkies and garage door openers. There is, however, some uneasiness by the Commission in exercising this discretion.

Licensing of spectrum users or operators should serve a useful purpose. There is, for example, considerable question whether the licensing of CB users is necessary or desirable. There are also questions in the operators field: Does the Government need to license operators and maintenance personnel? Couldn't the spectrum-using licensee be responsible for the use of his telecommunications equipment? There have been great strides made in new technology so that, in most cases, constant "fiddling" with equipment is no longer required; automatic alarm systems and/or periodic checks should be sufficient.

The CRC should have the clear authority to not require licensing if no useful purpose--such as a needed control of interference--would be served in so doing. Rather, the CRC should be given the express authority to employ blanket licensing or similar approaches (e.g., a rule authorizing specific uses). Relevant, efficient and flexible management of the spectrum resource requires this. We again construe Section 437 as providing such blanket or similar broad exemption powers for the proposed CRC ("such exemption is consistent with the purposes of this Act"). If there is any doubt on this score, explicit language should be added in Section 412(a).

Interconnection. Interconnection of private systems with common carrier facilities may best be left to the proposed CRC's discretion; its guideline could be whether or not such interconnection would be in keeping with the "purposes of this Act." Efficient use of the public's spectrum resource has been, and should be, among the considerations here.

Clearly, the proposed CRC should have the authority to require interconnection in the absence of substantial reasons to the contrary.

Jurisdictional Uncertainties. There are both regulated and unregulated entities in the land mobile radio services. The economically regulated carriers include both the wireline common carriers, that is, the telephone companies which provide radio telephone service, and the radio common carriers (RCCs), which provide only radio services but no traditional "hard-wire" telephone services.

Private systems of various kinds make up the unregulated systems. In order to avoid the costs of regulation but to take advantage of the economics of larger radio systems, several companies or individuals will often share a "private"

system. These sharing arrangements are frequently made with the help or at the instigation of a third party-often a mobile equipment manufacturer or dealer. With third party involvement, the wide eligibility for some of these shared services, and the relative case of acquiring service on a monthly fee basis, these shared arrangements can begin to take on the appearance of a traditional common carrier service. Moreover, with the development of repeaters which allow large service areas, and now with access to the public telephone network at the repeater site, these shared systems are becoming technically capable of providing service equivalent to the common carrier services-both radio telephone and paging. These so-called pseudo-common carriers often compete directly with the radio common carriers.

The above raises a number of questions:

(1) are there meaningful distinctions between the radio common carriers, the wireline common carriers, and the shared special mobile radio systems; (2) which, if any, of the land mobile radio systems require regulation and who should make that determination; (3) is State or Federal regulation appropriate when regulation is required; and (4) how should interconnection to the switched telephone network be provided for?

We believe that the distinction between the land mobile radio systems is minor, and will become increasingly difficult to maintain. Further, in our view, the cellular systems, at least under current circumstances, would appear to require regulation; they seem to have definite monopoly characteristics--high entry costs, significant economics of scale, and limited availability of spectrum.

We believe that individuals and companies who need mobile radio services should be free to acquire service by installing a private system, by sharing a private system with other users, or by acquiring the service from a common carrier. Likewise, entrepreneurs should be free to offer equipment either to users or to service providers and to assist them in making their system operable, whether that system is designed for one company, for shared use by companies and individuals, or as a subscriber system of a common carrier service. Futhermore, there should be freedom to interconnect with the wireline telephone network.

Many of these freedoms could be accomplished by deregulating the radio and wireline common carriers, and by legislatively requiring interconnection. However, in our previous testimony we expressed our belief that all intraexchange telecommunications

should be under State jurisdiction. This approach constrasts with that in H.R. 3333 which reserves to the States only the regulation of "local exchange telephone service" (Section 321(b)), but prohibits State regulation of any telecommunications service provided under a license issued by the CRC (Section 424(a)). If the State has jurisdiction over all "local" communications, the question of whether to rate deregulate any service would be the decision of the State regulatory authorities; there would be no Federal control, except for spectrum licensing and management. Not only would rate deregulation be out of Federal hands, but also questions of interconnection, from a non-spectrum aspect, between a local mobile radio entity and the local exchange telephone network would be decided by the State regulatory commission. Therefore, our desired scenario for (local) land mobile radio would be at the discretion of the States. While we thus cannot be sure that our preferences for policies governing such "local" communications will be adopted by the States, we believe that the States should have jurisdiction over such "local" communications. In our view, the proper distribution of jurisdictional authority in our Federal system calls for this accommodation and trust.

There is, however, an alternative to complete reliance upon the States to determine the need for regulation, which does not entail regulation from Washington or a present effort to determine definitively future policy in this dynamic field. That alternative is to give the Commission the authority to determine under what conditions regulation is required (as suggested in Carlos A. Roberts' testimony before this Subcommitte on May 1). This would not give the Commission authority to determine the details of that regulation, but would prevent any tendency on the part of State regulators to regulate where regulation is not necessary. For example, the Commission might determine that radio common carriers should be deregulated (except for radio licensing at the Federal level). While it does involve some line-drawing difficulties for States (see testimony on common carrier, pp. 11), it would present a more flexible approach to the problem than that in H.R. 3333, permitting judgment on the basis of evolving conditions in this dynamic field. We believe, therefore, that it should be given thorough examination by the Subcommittee.

If the States are only given the limited jurisdiction specified by Sections 321(b) and Section 424(a), that is, only over "local exchange telephone service", the question

becomes one of determining whether this description fits the land mobile radio services. Many systems today are not switched in the way telephone messages are switched, and paging systems could not properly be called "telephone". However, the wireline radio common carriers are likely to fall under this classification of "local exchange telephone", and the technology is available for many more systems to become both "telephone and switched." Indeed radio systems form one important class of alternatives to the hard-wired local telephone system. The States, therefore, would claim jurisdictional control over land mobile services, but there may be lengthy determinations to resolve whether or not a particular system is or is not "local exchange telephone service." The approach in H.R.3333 thus presents the States with some potentially difficult jurisdictional decisions. Further, it may allow for State jurisdiction over a mobile telephone service, while retaining Federal jurisdiction over the local paging service offered by the same company.

Most radio services, of course, are not regulated on the State level; the deciding factor is whether the service is a common carrier service. A local taxicab company, for example, that uses radio for dispatching purposes will not have its radio use regulated by state or local agencies.

Often, however, it is not clear whether a particular radio service is indeed common carrier in nature. In such cases, the FCC may make the determination that the service is not common carrier and, therefore, is not subject to state jurisdiction. This occurred in the 900 MHz case[3] decision, Docket No. 18262, which established a classification of specialized mobile radio system (SMRs) for the provision of dispatch services. The Commission's discretion to establish this service as a non-common carrier service was affirmed by the courts.[4]

Receiver Performance Regulation. Section 413 (a)(12) gives the proposed CRC the authority to regulate the performance characteristics of television receivers. No other receivers are mentioned. However, Section 413 (a)(6) provides that the CRC would have the power to prescribe rules governing the interference potential of equipment.

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[3] An Inquiry Relative to the Future Use of the Frequency Band 806-960 MHz, 51 FCC 2d. 945 (1975).

[4] National Association of Radiotelephone Systems v. FCC, 525 F.2d 630 (D.C. Cir. 1975), cert. denied, 425 U.S. 992 (1976) (NARUC I).

We believe that the proposed CRC should not regulate performance characteristics of receivers. We think that manufacturers can do a better job of satisfying consumers if they, instead of the Government, make the performance tradeoffs, many of which are very complicated.

As an example of how complicated these issues can get, consider the recent deliberations at the FCC concerning mandated lower UHF-TV receiver noise figures. The FCC has been the recipient of strong pressures to mandate lower noise figures in order to increase the technical comparability of UHF and VHF TV broadcasting. There are many ways in which a designer could achieve the mandated result (lower noise figures in this example), several of which are at odds with what the consumer would like and, for that matter, with what the Government would consider desirable from the viewpoint of overall spectrum use.

In the above example, lower noise figures could likely be achieved at the expense of other performance characteristics--such as selectivity and other susceptibility to interference characteristics. These other characteristics also influence UHF/VHF TV technical performance comparability but they also affect the efficient use of the spectrum in general.

Thus, regulation could easily turn into a "tar baby." Each time an attempt is made to correct a give "problem," a whole host of new problems might surface. The "corrective actions" taken to meet the new problems would in turn create still newer problems. And so on.

Thus, we believe that while the all-channel law has largely served a worthwhile purpose, we would not turn to the expansive powers in 413(a)(12). Rather, Congress should reserve that authority, only exercising it when convinced that overriding considerations for so doing are present. For example, while empowering the proposed CRC to regulate consumer electronics may ultimately prove necessary to alleviate interference problems, we believe that a thorough economic analysis of alternatives should first be undertaken. One alternative to regulation would be a consumer education program alerting buyers of the need to consider interference susceptibility as a purchase criterion (particularly in the area of high radio transmitter usage) together with the voluntary adoption by electronics manufacturers of standards for grading their products according to their general level of interference susceptibility. This alternative offers the potential to equip consumers to make more informed decisions in purchasing electronic devices. A proposed

CRC should be empowered to regulate only if overriding considerations for using a regulatory approach are present.

License Suspension (Section 432): We prefer the imposition of fines to suspension of licenses. Economics or other harm suffered from not being allowed to operate the radio service may be unnecessarily severe. Futhermore, as a practical matter, it would be very difficult in many cases to monitor whether the operations had indeed been suspended. No such problems arise in the case of forfeitures. And the latter, if substantial, can be as effective a deterrent as suspension.

No Separate Construction Permits. We commend the Subcommittee for doing away with the requirement of a separate construction permit--a pre-condition to actual licensing. This approach should ease somewhat the licensing burden to spectrum users. Also, it represents a positive approach in that it assumes the licensee will, in all good faith, meet all conditions of the license; only if proven otherwise would the CRC need to intervene.

Distress Signals and Communications (Section 434). We suggest that these comments be broadened to include "aircraft."

Unauthorized Interception Provision (Section 549).
Let me now turn to Section 549, the provisions in H.R. 3333 which would strengthen the privacy protections for communications.

As you are aware, the President has recently announced a broad initiative to ensure the privacy of the individual in our evolving "information society," a society whose hallmark is the ubiquity of computerized data banks and sophisticated telecommunications systems. These new technologies, while facilitating the delivery of many goods and services of society, have outstripped the ability of existing laws to protect information from misuse and unauthorized access. Existing communications privacy laws, intended to protect information in transit, must be changed to account for new forms of information transfer and increased sophistication of interception technology not contemplated when these laws were drafted.

For example, existing Section 605 specifies "divulgence" or "use" of a communication before there is a violation. Subsequent court cases have affirmed this requirement, Bufalino v. Michigan Bell Telephone Co., 404 F.2d 1023 (8th Cir. 1968), cert. denied 394 U.S. 987 (1969). This element arises, in part, because Section 605 was intended

to apply to common carrier employees who, as part of their employment, had to read (use) and re-transmit (divulge) messages in the communications systems. The law was thus drafted to focus on controlling "divulgence" and "use" (see phrases (1)-(6) of present Section 605), but was silent with regard to mere interception.

Interception alone may be used to collect a storehouse of information about an individual including banking, employment, health and social habits. It may be used to obtain sensitive business economic data in a digital form so complete and revealing that it would have astounded the "wiretapper" of the 1950's. But under the present law the interception may lawfully occur and the later use, triggering a violation, may be so far removed or so difficult to link to the interception that a prosecution becomes nearly impossible. Accordingly, society's concept of privacy has matured to the point where access to personal information through interception is viewed as an invasion of one's privacy, Report of Privacy Protection Study Commission, p.15 (July 1977). Thus, access to a communication--which may contain information on one's personal life--without the individual's consent is alone sufficiently repugnant to our expectations of privacy that the law should be amended to prevent such access.

Section 605 was, in fact, amended in 1968 when the Congress passed Title III of the Omnibus Crime Control and Safe Streets Act of 1968 (18 U.S.C. §2510 et seq.). This new law did forbid the mere act of interception in some circumstances, but the associated amendments to Section 605 actually cut back the scope of Section 605 from "radio and wire" communications to just "radio" (1968 USCCAAN 2196). In addition, 18 U.S.C. §2510(4) defines "interception" of wire communications as "aural" acquisition of the contents. An indirect (and I'm sure unintended) result of this was to leave questionable whether any information in non-aural form communicated over a wire, e.g., pictures, print, digital computer data, etc., may be intercepted, used, divulged, etc., without prohibition by these laws.[5]

In addition Section 605's standards, by which law enforcement agencies or others may lawfully receive intercepted communications from carrier employees, are inappropriately low for the volume and sensitivity of information carried in today's communications systems. NTIA, consistent with the thrust of the President's recent privacy message, believes

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[5] Miller, the Assault on Privacy 161-168 (1971); Metelski, "Achieving Communications Privacy," Federal Communications Law Journal 135 (UCLA 1978).

that the ex parte subpoena requirement of phrase (5) and the "other lawful authority" catch-all of phrase (6) of Section 605 are both inadequate for protection of information carried on present communications systems. This standard is inconsistently low with respect to court cases (see, e.g., Berger v. New York, 388 U.S. 41 (1967) and Katz v. United States, 389 U.S. 347 (1967)) and the privacy provisions enacted by Congress in Title III of the Crime Control Act of 1968 (18 U.S.C. §2516, §2518). In this same vein, interceptions by carrier employees should also be limited to only that necessary for provision of service.

NTIA SUPPORTS THE COMPREHENSIVE REVISIONS IN RE-WRITE SECTION 549

NTIA is firmly committed to strengthening communications privacy laws in the light of new technologies. We believe the revisions reflected by Section 549 will go far toward insuring the privacy of many types of communications now covered ineffectively (or not at all) by Section 605. We therefore support the Subcommittee's efforts in this undertaking.

Section 549 avoids the confusion of technological distinctions by applying itself to all forms of "communications" in a generic fashion through its comprehensive definition of this term. We believe this is a fundamental necessity for any sound communications privacy law, because whether a particular communication is "wire," "radio," "oral," "optical" or other should not be the dispositive legal issue in determining whether privacy protections will apply.

The type of communication is only one of many factors to be considered in determining whether a communication is legally entitled to claims of privacy. Whether a communication is entitled to privacy protections of law depends on the "reasonable expectation" of the parties to the communication, a standard including all circumstances of a particular communication, see, Katz v. United States; Berger v. New York, cited supra. This criterion is well established in the law and one which, we believe, is the only test workable given the variety of situations in which different forms of communications occur. Compare United States v. Hall, 488 F.2d 193 (9th Cir. 1973); United States v. Sugden, 226 F.2d 281 (9th Cir. 1955); State v. Cartwright, 418 P.2d 822 (Ore. 1966).

Section 549 correctly adopts this criterion by protecting "private communications" and by incorporating a "reasonable expectation" of privacy in its definition. This criterion would require judicial scrutiny of the facts and circumstances surrounding each communication for which an aggrieved party claimed an expectation of privacy. The determination would involve not only the individual's expectations, but an assessment of whether that expectation is one that society is prepared to recognize as reasonabale, United States v. Fisch, 474 F.2d 1071, 1076 (9th Cir. 1973). Thus, we would anticipate that many forms of communications such as omni-directional public service radio, etc., for which a large and established market of receiving/scanning devices exists, might not reasonably claim to be "private communications" in contradiction of reality. The Subcommittee may wish to consider specifying in the legislation certain forms of communication which would have no "expectations of privacy" and thus no protections under the law. If communicants were to employ protection devices in an affirmative effort to obtain privacy, that would also be a consideration for the court in determining whether an expectation of privacy was "reasonable."

Despite the flexibility that this case-by-case approach would provide in determining whether a particular "expectation of privacy" was reasonable, we note that the Congress and the courts have found that certain types of communications have an absolute expectation of privacy without a case-by-case examination of the circumstances (i.e., "wire" and "telephone" situations). As developed within, we would amend Section 549 to reflect these findings. More to say on this point the latter portions of this testimony.

Access to communications by government officials has been a major privacy concern, (see, e.g., Interception of Nonverbal Communications by Federal Intelligence Agencies: Hearings on Government Operations (Project SHAMROCK), 94th Cong., 1st and 2d Sess. (1975-76)). Following the lead of the rewritten criminal code (S. 1; S. 1437), Section 549 permits government officials access to private communications only to the extent authorized by other laws (para. (c)). It also provides explicit exemption for activities authorized under the "wiretap" and Foreign Intelligence Surveillance Acts.

PROPOSED NTIA MODIFICATIONS

Section 549 is a significant, major improvement over existing laws intended to insure communications privacy. However, NTIA believes that certain modifications should be made to ensure that the privacy of communications would be comprehensively achieved now and in the future.

As I noted previously, the privacy standards of clauses (5) and (6) of Section 605 are inadequate, permitting divulgence of carrier communications by an inconsistently low standard in comparison to other laws. For example, Title III of the Crime Control Act establishes a "probable cause" standard for access by government or other third parties (18 U.S.C. §2516, §2518). The recently enacted Foreign Intelligence Surveillance Act (P.L. 95-511) requires independent review by a court before any surveillance directed at a particular individual may be conducted, and if that individual is a U.S. citizen and not also a "foreign power" or "agent of a foreign power," then the "probable cause" provisions of Title III would apply.

NTIA views this legislative activity by the Congress and the recent legislative proposals by the Administration

as reflecting the appropriateness of strengthening privacy protections for communications. Therefore, clauses (5) and (6) of Section 549(a), permitting divulgence of communications by carrier employees in response to a subpoena or on demand of "other lawful authority," should be deleted. Access standards for "carrier communications" would then become, appropriately, the same as for "private communications" in the bill, i.e., that of a warrant issued and executed at the lawful direction of a court and implemented under para. (c)(2) of the bill.

As discussed previously, we believe that the determination of what consitutes a reasonable expectation of privacy is critical to the workability of this law. On the one hand, the party's subjective expectation at the time of communicating must be taken into account, but there also must be an objective evaluation of the facts and circumstances surrounding the communication to determine if the parties expectations are ones which society is willing to accept as reasonable, United States v. Fisch, cited supra. Thus, NTIA believes the definitional language for "private communication" in the bill should explicitly make clear that circumstances surrounding the communication must also be taken into account, as well as the reasonable expectations of the party (i.e.,

by adding the phrase, "...under circumstances justifying such expectation," with accompanying legislative history).

This expectation has been established for certain communications and in these instances should be written into the present law. There is an expectation of privacy for "wire" communications established by Congress in its enactment of Title III of the Omnibus Crime Control and Safe Streets Act of 1968 (18 U.S.C. §2510(1), 2511(a)), and a consistently held "reasonable expectation of privacy" in the telephone system, Katz v. United States, 389 U.S. 347, 352 (1967); United States v. Hall, 488 F.2d 193, 196 (9th Cir. 1973).

However in the telephone network we are dealing with a diverse mixture of media. Some of these, especially those associated with mobile telephones, even though functionally an extension of the telephone network, are such that technical impracticalities of preventing interception militate against adopting an absolute protection from interception. We would thus suggest that in such cases the protection against interception would be based on a "reasonableness" test instead of being absolute. Yet, because we are still dealing with telephone communications, we would, at the same time,

extend to such service protection from disclosure or use. We think this would reflect present expectations of society, and help ensure that those expectations continue to exist in the future through explicit legal protections.

With respect to authorizing interceptions by carrier personnel, we recognize that employees of the carrier providing the service will, at times, be placed in a position which might otherwise be technically considered as intercepting the communications. We therefore support the exemption for this kind of common carrier activity. However, we urge that some of the original limiting language discussed in the legislative history of Title III of the Omnibus Crime Control Act of 1968 be inserted to make it clear that such interceptions, besides being incidental to the business of common carriage of communications, ought to be necessary, and conducted under a controlled procedure and in accordance with recognized minimization guidelines, such as those incorporated into the Foreign Intelligence Surveillance Act. That way we can be assured that the common carrier operation will not be hampered and the customer's privacy will be preserved.

NTIA believes that the exemption dealing with "theft of service" ought to be removed. Our common basic objective in restructuring this section is to tighten the processes and conditions under which authorized interceptions may occur. Yet the effect of this flat exemption is to allow warrantless interceptions for what is a relatively minor crime of fraud. We believe that the implicit authorization of non-federal employees to conduct criminal investigations may set an undesirable precedent. While we certainly share the concern about abuse to the telephone system, we are not convinced that the abuse incurs a sufficiently high public cost to justify such extraordinary measures.

Another area of relatively major significance is the perhaps inadvertent omission of the term "letter" from the exclusionary provisions of the last sentence of the definition of "private communications," para. (f)(4). NTIA believes that Congress has already spoken to the privacy of corporeal postal matter in the postal privacy statutes (see, e.g., 18 U.S.C. §§ 1701-1709) and that the Communications Act should not duplicate this coverage. We note that the definition of telecommunications in H.R. 3333, Section 102(21), would not include corporeal postal matter and the commensurate exclusion in Section 549(f)(4) should

be made. (NTIA is not expressing any opinion here whether the privacy of "wire or radio" communications under existing definitions in the Communications Act, Section 153(a), (b), would be provided by Section 605 or the postal statutes.)

Finally, NTIA believes certain minor changes in the text should be implemented in the interest of clarity and eliminating redundancy. The reference in Section 549(a) to Chapter 119, Title 18, as an exemption from provisions of the bill, should be expanded to include Chapter 36 of Title 50 (the Foreign Intelligence Surveillance Act). Also in Section 549(a), the terms "existence" and "substance, purport, effect or meaning" should be eliminated because they are included in the definition of the term "contents," para. (f)(2). Section 549(d) should be eliminated as essentially addressed in the "private communications" definition of Section (f)(4). Section 549(b)(2) should be re-worded for grammatical corrections to read "(2) disclose to any other person or use the contents of any private communication, with knowledge that...."

We hope these comments, both on general principles regarding spectrum fees and regulation of land mobile and other radio services, and on some specific elements within the Bill, will be helpful to the Committee. We appreciate this opportunity to appear before you.

Mr. MOTTL. Thank you very much, Mr. Bortz. We will hear from Mr. Charles Meehan, Land Mobile Communications Council.

STATEMENT OF CHARLES M. MEEHAN

Mr. MEEHAN. On land mobile matters, I will be speaking for the Land Mobile Communications Council (LMCC) which is a broad based trade association representing private users, common carriers and equipment manufacturers.

I will also be touching on some microwave matters as well as land mobile and on microwave I will be speaking for the Utilities Telecommunications Council (UTC) on that area because the utilities it represents are probably the heaviest users of private microwave in the country.

I do have authority to speak for both of these organizations and the views I am expressing are not just my personal views.

The area I am going to concentrate on, as I understand the latitude from the letter, is: "Would the proposed spectrum use fee be workable and would it improve spectrum management?"

I will deal with the latter part first. In so far as land mobile and presumably private and common carrier microwave is concerned, if by "spectrum management" you mean the most efficient use of the spectrum for the highest public interest purposes, we do not see how a fee based on the profits of the least profitable UHF TV broadcaster in a given community is going to provide any incentive whatsoever for a land mobile or private or common carrier microwave users to use their land mobile or microwave spectrum any more efficiently.

The fee basis has nothing to do with their use of the spectrum. Furthermore, it has no bearing whatsoever on what public interest purpose, if that exists, they use the spectrum. Even as the broadcasters, we question whether the spectrum use fee will improve spectrum management.

The operation of the fee is tied to the profits of the broadcaster not to his use of the spectrum or the amount of spectrum he uses or how he uses that spectrum.

Section 413(d)(1), at least in our view, imposes no obligation whatsoever on the CRC to reduce the fees even if the broadcasters would make more efficient use of their spectrum. In fact section 413 may deter more efficient use. Let's assume new TV "Taboos" are developed, resulting in a new TV assignment plan, making more efficient use of that spectrum. If the new spectrum were allocated under the act, not by the CRC but by NTA say to public television, that allocution could result in a substantial additional number of public television stations which could have the result of reducing the revenue of the commercial broadcasters.

If the revenue of the broadcaster is reduced, even though it is by more efficient spectrum, I wonder whether or not the CRC would feel compelled to reduce the fees if their revenues from the fees would be reduced. I would venture to say if they see a substantial drop in their revenue base from fees, the inclination of the regulator and in this case also the collector of the fees would be to increase the fee basis.

It would seem to me that unless some blockage is put into the act that it would be the natural tendency to pass the fees onto the

ultimate consumer, whether that is in price of gas at the pump or electric utility bills or telephone bills or for that matter advertising rates on television or radio.

It may well be cheaper to pay the fee and pass it on rather than spend the money on the new technology unless and until that fee got greater than the new technology or the new technology brought substantial benefits which could then be converted to money.

It would seem to us that where you do rely on the use of spectrum to make revenues such as in broadcast, it might well be in your best interests to continue paying the fee and not adopt new technology which might let in competitors.

As far as a spectrum management tool, we have the same problem here that we had with the fee before, it simply is not universal and it lets go probably one of the biggest users of the spectrum in the country, namely the Federal Government. In a way I agree, it is taking from Peter to pay Paul for the government to be required to pay fees but nevertheless, if an agency head has to include that in his budget, I would certainly think this would be an incentive for him to consider alternate means of communications.

LMCC questions whether spectrum use fees, at least as proposed and I think this would also apply to auctions and bids, is really alone a spectrum management tool. It may result in only those who can afford to pay the price being the ones to get the spectrum. This may result only in fewer users.

To us it is not spectrum management just to reduce the number of people who have access and are using the spectrum particularly if it is reduced to only those with the deep pocket. We feel there are no public interest considerations reflected in that method.

In essence, it is not spectrum management merely to assign spectrum to those to whom it has the greatest value. To us it seems the spectrum manager has two roles. First of all he has to determine what are the best uses and those should be consistent with section 101 of your bill. Namely, those affecting large numbers of the public, safety and national defense. Once he determines that, he should use a variety of methods, not just economic methods, to determine what is the most efficient use. It might be engineering. It might be marketplace demands. It could be social, legal or political considerations.

For example, in the early days in the 1960's, we had an emphasis on engineering, channel splitting and this type of thing. That worked. I do not see that we can say it did not work. Later on we made a try at data processing and monitoring. I cannot say that worked. I do not think we should put all of our eggs just in one basket. I think the spectrum manager should be required to employ a multitude of techniques to arrive at the most efficient use, once he has made a decision, on the record, as to what is the best use.

Instead of relying only on spectrum use fees as spectrum management tools, we would suggest you have a new section dealing specifically with spectrum management and allocation matters, more or less along the lines of section 436 and establish statutory criteria consistent with section 101 of your bill which the CRC must follow in spectrum management and spectrum allocations decisions. These would include such things as I have mentioned, safety of life and property; promoting competition and reflecting

market demands, and uses which benefit large numbers of the public.

Then you can give the CRC sufficient flexibility again consistent with section 101, to employ various methods and techniques to make the most efficient use of that spectrum it does allocate. But do not give the CRC unlimited authority to do what the CRC considers to be consistent with the act as you have proposed in sections 436(b)(1) and 436(b)(2)(D). Rather we would require that a proper record in fact be established for the decision and let Congress and the courts determine if the action or the finding of the Commission is consistent with the act.

It just does not make sense to us to give the CRC or any regulatory agency the kind of authority where it determines what is consistent with the purposes of the act. We feel that should always be subject to the normal checks and balances of either congressional oversight or more likely user appeal to the Federal courts.

If you are going to enact spectrum use fees particularly along the lines of the bill, there are three or four areas that we feel need clarification.

Section 414 speaks of land mobile. Does this also include microwave systems? I have in mind a system which I licensed which extends from Columbus, Ohio through West Virginia into the Washington metropolitan area up into the Pittsburgh area and into Delaware. It goes through a multitude of communities. Sometimes the stations are in a community and sometimes they are on a mountaintop out in the boondocks.

How would we apply this fee to a microwave system such as that?

How would we apply the fee proposal to a wide area mobile systems? For example, I can think of a number of utilities which operate in three or four States having communities as big as Chicago down to small towns of 1,000 and 2,000 people.

As to land mobile, if you would have more sharing per channel in an area than in another area, how would the fee vary?

In sum, we would say if you are going to use fees, let's recognize it is either going to be a license fee to cover the costs or basically a tax on the use of the spectrum. But to base all of your spectrum management on license fees or economic considerations, whether they be auctions or bids, might make it easier for the regulator but it certainly is not going to accomplish what we feel and what we expect would be spectrum management.

Thank you.

[Testimony resumes on p. 1542.]

[Mr. Meehan's prepared statements and attachment follow:]

Before The
Subcommittee on Communications
of the
House Interstate and Foreign Commerce Committee

STATEMENT OF THE LAND MOBILE COMMUNICATIONS COUNCIL
ON
H.R. 3333 - COMMUNICATIONS ACT OF 1979

The Land Mobile Communications Council (LMCC) appreciates this opportunity to present Comments concerning those provisions of H.R. 3333 which affect its membership.

LMCC is a non-profit association of users of land mobile radio and providers of land mobile services and equipment which is dedicated to securing and maintaining sufficient allocation of radio frequencies for the Land Mobile Services - both private and common carrier - to meet the immediate and long term requirements of land mobile users. As will be noted from a review of the attached LMCC roster, LMCC represents a very broad base of land mobile interest.

LMCC's principal interest in this Bill is with respect to Title IV dealing with the land mobile and other radio services. We will also address, however, directly related provisions of Title VII.

TITLE IV CONSIDERATIONS

License Fee Proposal Will Be Neither an Effective Spectrum Management Tool Nor Will It Be Workable

LMCC does not believe that a fee based upon the profits of UHF-TV braodcasters will provide any incentive for land mobile users to utilize their spectrum more efficiently since the fee basis has nothing to do with land mobile utilization of the spectrum.

Even as to broadcasters, LMCC questions whether the proposed spectrum use fee will improve broadcast spectrum management since the operation of the fee is tied to the broadcasters' profit, not to its use of the spectrum. Additionally, Section 413(d)(1) imposes no obligation on the Communications Regulatory Commission (CRC) to reduce fees even though the broadcasters would begin utilizing the spectrum allocated to them in a more efficient use such as by reducing TV taboos and developing a new assignment plan which would provide for additional spectrum for other use. In fact, more efficient use through the reduction of taboos and the development of additional UHF-TV space might mean that the commercial TV broadcasters would be faced with more competition from public television, the net result being a reduction in the profits by broadcasters and thus, presumably, a reduction in the revenue which the

CRC would collect from broadcast fees. LMCC questions whether, in such a situation, the CRC would be likely to recommend a reduction in the broadcast fee even though more efficient utilization of the spectrum is being made by the broadcasters.

Additionally, the requirement of Section 413(d)(1) that any substantial changes in broadcast assignments must receive the concurrence of both houses of Congress before they will be implemented, coupled with the fact that the CRC will not have any allocations authority, but rather, any reallocation must be made by the proposed National Telecommunications Administration (NTA) will tend, LMCC submits, to deter better utilization of the broadcast spectrum and may, in fact, have the net effect of freezing the existing broadcast allocations.

Additionally, LMCC questions the usefulness of fees as a spectrum management tool since, in most cases, they will be passed on to the ultimate consumer in higher prices for goods and services, including broadcast advertising rates. Also, one very serious flaw in the proposed fee arrangement is that it is not universal and does not apply to one of the greatest consumers of spectrum, the Federal government.

LMCC is very concerned over the tendency in Government to rely solely on economic considerations as the principal spectrum management tool whether these economic considerations be spectrum use fees, auctions or sealed bids. LMCC is concerned that all of these economic based tools may result in only those who can afford to pay the most money securing the spectrum. Thus, the net effect of this so-called "spectrum management" will be fewer users of the spectrum. Complete reliance on economic based approaches such as spectrum use fees, auctions and sealed bids lacks any reflection of public interest considerations.

In fact, LMCC submits that it is not "spectrum management" to merely assign spectrum to those to whom it has the greatest "value." Rather, the role of the spectrum manager should be to first allocate and assign spectrum to those who use the spectrum in the highest order of the public interest. Then, the spectrum managers should see that the persons to whom the spectrum has been assigned or allocated will use it in the most efficient manner. Fees alone, LMCC submits, will not accomplish this. The only thing it accomplishes is to make the work of the spectrum manager or regulator easier since he can rely entirely on "market forces" rather than attempting to develop the information needed to make sound regulatory decisions.

LMCC believes that the spectrum manager should be required to take a number of factors into consideration in determining the most important and most efficient use of the spectrum. These factors would include engineering, social, legal and political considerations.

Thus, instead of permitting reliance only on spectrum use fees as the prime spectrum management tool, it is suggested that a new section of H.R. 3333 be developed dealing with spectrum management which would establish the following statutory criteria:

- the proposed use of the spectrum will assist in the provision of services to large numbers of the public;
- the proposed use of the spectrum will promote safety of life and property;
- the proposed use of the spectrum will promote competition.

While LMCC believes that the CRC should be given sufficient "flexibility" to employ various methods and techniques to improve efficient use of the spectrum, LMCC does not believe that the CRC should be given unlimited authority to do what the CRC considers to be consistent with the Act as has been proposed in Section 436(b)(1) and Section 436(b)(2)(D).

Rather, LMCC urges that the CRC be required to develop a proper record and fact basis for its spectrum management decisions and then let the Courts determine if the action taken by the CRC is consistent with the Act. Congressional oversight would also assist in this area. LMCC believes it is dangerous to give any regulatory agency the power to adopt what it considers to be consistent with its own enabling act. Rather, this judgement must be left in the hands of the Courts and, ultimately, the Congress.

During the June 6 panel presentation on spectrum management for land mobile and other services, there was considerable discussion concerning when "auctions" should be utilized as a "spectrum management" tool. While auctions may cut down the time and cost burden of comparative hearings, such as in Broadcast licensing, LMCC does not see how the concept of auctions could be applied to the private land mobile services where a given frequency in a given geographic area is already shared by a multitude of users. Also, there is very great concern that the use of auctions for land mobile spectrum, even if they were only used as to "new" land mobile spectrum with loading standards, will result in only those with the "deepest pocket" securing authority to use the spectrum, which is not necessarily in the public interest. Again, it would seem that the applicability of

this "economic tool" merely makes the job of the regulator easier in that the regulator does not have to develop the facts, through hearings or otherwise, to determine which among several contenders (services or individual applicants) for spectrum has the best qualifications. All that auctions do in this case is to let he who is able to pay the most money secure the license and the use of the spectrum. It does not necessarily follow that the highest bidder will also be the one to put it to the best "public interest" use or will spend the money to use the spectrum in the most efficient manner. This is hardly "spectrum management." Thus, at best, auctions should only be employed where there has already been a determination that the contenders are equally qualified from a public interest point of view and where the person who ultimately receives the license will have exclusive use of the spectrum. The most logical area of application is in the broadcast area where assignments are already fully exclusive. The fact that the broadcast licensee does not control the receivers or that additional receivers do not congest the channel does not mean that auctions for broadcast channels will not eliminate the costs and inefficiencies of broadcast comparative hearings. Also, that argument overlooks the fact that it is additional transmitters, broadcast or otherwise, not receivers that impose additional costs on other users of the spectrum.

Thus, prospective broadcasters who wanted to enter the market should be willing to absorb these costs as well as any other user of spectrum. Ironically, however, proponents of auctions and sealed bids have recently indicated this economic tool should not be applied to broadcast assignments. Instead, they now seek out only the private land mobile services or the common carriers as the subject of "experimentation" with such economic based methods.

Apart from LMCC's concerns over the validity of spectrum use fees, auctions or sealed bids as a "spectrum management" tool, there is also a serious concern over the workability of the fee basis as proposed in H.R. 3333 as it applies to land mobile. For example, in many situations licensees are authorized to utilize the same frequency over a wide geographic area, and in some cases, even on a "continental United States" basis. Thus, the licensees' utilization of this particular frequency would be in a multitude of different "communities with UHF-TV." Thus, a multitude of UHF-TV profit pictures would have to be considered in trying to arrive at the spectrum use fee for such a licensee.

Also, as to private land mobile, in most cases the frequencies are shared by at least several users in a given area. Does sharing of the same frequency by different users in the same area result in a reduction of the fee paid by such licensees?

TITLE VII CONSIDERATIONS

Vesting Exclusive Allocation Authority in NTA is Inappropriate Absent Proper Procedural Safeguard

It is generally acknowledged that the establishment of an agency within the Executive Branch (NTA) for the purposes of studying telecommunications issues and developing appropriate policies is a proper legislative goal. However, LMCC is deeply disturbed that H.R. 3333 would also entrust NTA with exclusive authority for the allocation of the entire radio spectrum.

In LMCC's view, the present system of shared allocation responsibility between the FCC and NTIA and its predecessors has worked reasonably well over time. The active involvement of the FCC in the overall allocation process, plus the necessary tension which occasionally is generated by virtue of the system of dual authority, provide some assurance that the interests of non-government users of the spectrum will be adequately represented. However, this valuable safeguard would be eliminated by H.R. 3333. Pursuant to Section 704, NTA would act as the primary spokesman for government agencies on telecommunications matters and would assist in the development and management of telecommunications systems operated by various federal agencies. LMCC is not at all confident that an agency with such a mandate could adequately and fairly represent the interests of non-government users in

those situations where the competing demands for spectrum and other concerns of government and non-government users are in serious conflict.

Moreover, the problem is accentuated by the absence in H.R. 3333 of any provisions concerning the procedures by which NTA must conduct its allocation proceedings. LMCC respectfully submits that if Congress vests NTA with any allocation authority, the legislation must also explicitly provide that NTA's decision making process be governed by the Administrative Procedures Act, or like procedures. Only in this way can the interests of all users of the spectrum be adequately protected. LMCC understands that national security considerations might require special attention, but such situations should be considered to be the extraordinary exception - and specific procedures applicable to such circumstances should be explicitly provided for. Otherwise, the basic requirements of the APA should be adhered to; all allocation proceedings should be open and subject to public participation.

Respectfully submitted,

LAND MOBILE COMMUNICATIONS COUNCIL

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June 22, 1979

LAND MOBILE COMMUNICATIONS COUNCIL MEMBERSHIP LIST
(LMCC)

AMERICAN ASSOCIATION OF STATE HIGHWAY & TRANSPORTATION OFFICIALS (AASHTO)
AMERICAN AUTOMOBILE ASSOCIATION (AAA)
AMERICAN PETROLEUM INSTITUTE (API)
AMERICAN TELEPHONE & TELEGRAPH COMPANY (AT&T)
AMERICAN TRUCKING ASSOCIATION (ATA)
ASSOCIATION OF AMERICAN RAILROADS (AAR)
ASSOCIATED PUBLIC-SAFETY COMMUNICATIONS OFFICERS, INC. (APCO)
EASTERN STATES PUBLIC-SAFETY RADIO LEAGUE (ESPRL)
ELECTRONIC INDUSTRIES ASSOCIATION (EIA)
FOREST INDUSTRIES TELECOMMUNICATIONS (FIT)
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INTERNATIONAL ASSOCIATION OF FIRE CHIEFS (IAFC)
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SPECIAL INDUSTRIAL RADIO SERVICE ASSOCIATION, INC. (SIRSA)
TELOCATOR NETWORK OF AMERICA, INC. (TNA)
UNITED STATES INDEPENDENT TELEPHONE ASSOCIATION (USITA)
UTILITIES TELECOMMUNICATIONS COUNCIL (UTC)

Before The
Subcommittee on Communications
of the
House Interstate and Foreign Commerce Committee

STATEMENT OF THE
UTILITIES TELECOMMUNICATIONS COUNCIL
CONCERNING H.R. 3333; TITLE IV, SPECTRUM MANAGEMENT,
PRIVATE LAND MOBILE AND MICROWAVE SERVICES

The Utilities Telecommunications Council (UTC)[1/] respectfully submits this Statement in response to the request made by the Subcommittee Staff during the June 6, 1979 panel discussion concerning spectrum management in the land mobile and other services, to expand upon the role of auctions, sealed bids and license transferring as spectrum management tools.

Before discussing the usefulness of these economic approaches as spectrum management tools, let us first examine the alleged need to place such heavy reliance on these economic tools. The primary justification given during the June 6 panel discussion by the proponent of such heavy reliance

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1/ UTC is the national representative on telecommunications matters of the nation's electric, gas, water and steam utilities (Energy Utilities). The Energy Utilities represented by UTC include in excess of 3000 investor-owned, cooperatively-owned and public-owned utilities. They range in size from large, urban utilities, each serving several million consumers to many small urban utilities and rural electric cooperatives, each serving several thousand consumers.

on economic considerations as the major spectrum management tool is that it is "extremely difficult to obtain accurate data on an applicant's need for spectrum, on the value of the spectrum to present users, on the costs associated with reallocation, on the costs of utilizing more efficent technology and many other areas."[2/] More recently, the reason given for the shift to these economic tools for spectrum management was because in order to meet the public interest requirements of Section 1 of the 1934 Act or those of Section 101 of S. 611, "far more complex and detailed information is required than can, in fact, be gathered and processed centrally."[3/] First of all, as I indicated in the panel discussion on June 6, these "cannot do" reasons given by the proponents of the use of economic tools for spectrum managment are simply not valid. These arguments for the need for economic tools only reflect the inability or perhaps unwillingness of the current spectrum managers within the Federal Communications Commission to make the effort to meet the admittedly hard challenge of compiling sufficient and reliable facts upon which sound regulatory decisions can be made as to allocation or frequency assignment matters. Instead, the

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2/ See statement of Carlos V. Roberts, June 6, 1979 re H.R. 3333 before the House Communications Subcommittee, page 1.

3/ See statement of Nina W. Cornell and Stephen J. Lukasik re S. 611 and S. 622, dated June 18, 1979 before the Senate Communications Subcommittee, page 7.

current spectrum managers of the Federal Communications Commission choose to take what appears to be the easier road of relying entirely on "market forces."

The fact is, that other spectrum managers in the United States, namely those responsible for management of the spectrum used by the Federal government have found an effective method to gather and process centrally the more complex and detailed information required to make current spectrum management decisions. As was pointed out at page 25 of the Statement of Stanley I. Cohn, representing the National Telecommunications and Information Administration (NTIA), which was presented to this Subcommittee on June 12, 1979, the Federal government's spectrum regulators have already implemented two programs to enhance spectrum management through the use of analysis techniques. Under NTIA's "Spectrum Resource Assessments," an analysis is made of present and projected use of various allocated bands, determining the potential compatibility problems and corrective actions to mitigate interference between systems, determining inter- and intra- service sharing opportunities and providing recommendations on improving the efficiency and effectiveness of spectrum use in the bands studied. Similarly, NTIA's "System Review Procedure" performs an examination at the conceptual, experimental, developmental and pre-operational

stages of proposed Federal communications systems. Both of these programs, according to the NTIA witness, have proved to be very useful in Federal spectrum management and in the NTIA's spectrum planning efforts. If these spectrum management approaches can solve the "difficult" allocation and assignment problems of NTIA, why will they not solve similar "difficult" allocation problems of the Commission?

It is significant to note, UTC submits, that the Federal government's spectrum managers are still relying on more classical spectrum management approaches, rather than applying "economic tools" to solve their spectrum management problems. While the reluctance on the part of the Federal government users to even experiment in the use of economic tools may be due to legal restraints in the 1934 Act, which apply to both government and non-government users, nevertheless, the fact remains that the Federal government is not even suggesting the application of economic tools to Federal government spectrum management problems.

If spectrum management programs such as those developed for NTIA for Federal government spectrum users have, in fact, proved to work for the Federal government spectrum, perhaps these same proven methods should be applied to non-government spectrum management problems, at least before

Congress subjects non-government users to the hazards of large scale "experimentation" with what are, essentially, classroom economic theories which have not been tested in the real world.

Insofar as to the applicability of auctions, or, for that matter sealed bids, the only place where UTC can see such a system working is in situations such as Broadcast or Common Carrier where there are a number of contenders for an exclusive channel. Even here, however, there should first be a determination by the regulatory agency, by rule making, hearing or otherwise, that the various contenders or participants in the auction have equivalent qualifications and that the intended use of the spectrum by all contenders is essentially the same from a public interest point of view. The only real purpose the auction serves is to eliminate the cost and time of any further comparative hearings which would otherwise be required to determine which of the relatively equal contenders should be given the assignment.

The previous testimony of the panelist from the Commission[4/] confirms that the concept of the auction was

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4/ See testimony of Carlos V. Roberts on applicability of auctions as a spectrum management tool, pages 76-77 of Transcript of Hearings before the House Communications Subcommittee re H.R. 13015, September 21, 1978.

not intended for widespread use in the land mobile services and that there are only a limited number of circumstances in which an auction could be usable. First of all, as he pointed out in his previous testimony, one of the conditions for use of the auction would have to be that the frequency is not shared with more than one licensee but is assigned exclusively to one entity.[5/] Typically, this does not occur in most of the land mobile services. It would occur, however, he noted, with the mobile telephone service provided by radio common carriers and other common carriers. It occurs also with public coast stations in the Maritime Service. He also confirmed in that previous testimony that the motivation behind proposing the auction is that in many cases in these services where the Commission can only license one individual on a channel and its exclusive use for one licensee, the Commission gets into very long, expensive and protracted hearings and essentially the auction will provide an easier method of resolving the assignment decisions.

5/ This would seem to preclude the use of auctions even as to land mobile spectrum which was subject to loading standards since it is still possible to have more than one licensee on the channel. See page 21 of Dr. Cornell's June 18, 1979 Statement re S. 611 and S. 622.

It would not seem appropriate, therefore, to apply auctions to existing Power Radio Service spectrum since that is shared. Even as to any "new and exclusive" allocations which might be available to Power Radio Service licensees, or at least available to be accessed by the Energy Utilities, auctions may not be in the public interest since, presumably, Energy Utilities would be competing for the same spectrum with other types of users and it is entirely possible that another contender, with more funds to spend in the auction, would be the "winner." It does not follow that the applicant with the largest amount of money to spend at an auction is necessarily the best recipient of the spectrum, from a public interest point of view.

Thus, for these reasons, UTC submits that auctions (as well as sealed bids or lotteries) would probably have very little, if any, positive role to play in the spectrum management of the frequencies used by the Energy Utilities or other private land mobile users. The only place where auctions would serve any useful purpose would be in Services such as Common Carrier or Broadcast where there is an exclusive assignment made and the recipient of that assignment is able to generate revenue as a result of "winning" in the auction. In the Power Radio Service there is no such "revenue generating" incentive, since the use of radio is

a tool to improve the efficiency and safety of Energy Utility operations and to enhance the provision of vital utility services to the general public. Similar considerations apply to other private land mobile services.

UTC submits that it would be much more in the public interest to use procedures such as those found in NTIA's "Spectrum Resource Assessments" to make the determination as to which of many contenders for spectrum would be the best recipient, in terms of the basic goals of H.R. 3333, namely, service to large numbers of the public, the promotion of safety of life and property and the promotion of competition.

As to the concept of transferring licenses, while this might conceivably be practical on a small scale in a specific given and relatively confined geographic area, it does not seem to have any practical applicability to Energy Utility operations or other wide area or ribbon operations where it would be necessary for a utility operating over several states to "buy up" all of the licenses on a given frequency or set of frequencies in the multiple state area so that a utility would have a compatible system-wide communications net.

It is for these reasons that during the panel presentation UTC's witness urged that the "economics only" approach be abandoned in H.R. 3333 and that instead, a new section on spectrum management be developed which would require the regulatory agency to take into consideration a number of factors such as engineering, legal, social and even political considerations as well as, of course, what is the market demand. This seems to be the type of approach being used in NTIA's "Spectrum Resource Assessments."

Respectfully submitted,

UTILITIES TELECOMMUNICATIONS COUNCIL

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June 22, 1979

Mr. MOTTL. Thank you very much, Mr. Meehan. We will next hear from Mr. Don Franco.

STATEMENT OF DON FRANCO

Mr. FRANCO. Mr. Chairman, members of the committee and staff, my name is Don Franco. I am president of Microband Corp. of America.

I suspect most of you have not heard of Microband or have any knowledge of what we do. I think it would be worthwhile to say a couple of sentences on that point before I address the comments.

We are in an industry called multipoint distribution service which has been in existence for about 8 or 9 years. It was created by the FCC to provide broadband distribution within metropolitan areas of video and data signals. We operate using the radio frequencies and thereby provide a very low cost method of distribution.

Today the industry is operating in approximately 68 major markets and we expect by the end of this year that number would increase to about 100 major markets.

We generally support the main thrust of the legislation namely that the marketplace is a better regulator than the Government. We wish to make one or two points which we think will strengthen the overall thrust of the bill.

We agree that the Commission's management of the spectrum should be guided by two overriding principles. First that the spectrum is a limited resource and second that competition rather than Government regulation is a more efficient and effective regulator of prices and services. Consistent with these principles we believe that the legislation should make it clear that before frequencies are allocated for a given purpose, the CRC must determine that those frequencies already allocated and which could provide such service are being substantially utilized.

The only exception to such a requirement would be where a service is a necessity and where additional spectrum should be allocated so as to foster competition.

In addition we believe that if spectrum has been licensed for a given purpose but is in fact not being used and there is no evidence of its future development along those lines, that the CRC should be fully empowered and encouraged to revoke whatever authority has been granted and reallocate such spectrum.

We are aware of at least one allocation of frequency comprising over 100 megahertz of spectrum which in its dozen year history has seen limited use and there presently exists no trend towards its further development. At the same time, a party has called for the reallocation of over 100 megahertz of other frequency for a service it intends to provide while existing frequencies available for its intended purpose are not yet fully utilized.

Both cases present spectrum management problems which should be addressed in this legislation.

We believe the bill should be amended to require interconnection among all carriers and not just intraexchange carriers. Such a requirement, we believe, will tend to preserve limited spectrum space.

We believe the spectrum fee provided in the bill unreasonably discriminates against small business as well as against carriers and will thereby discourage the provision of new common carrier service. This provision appears to be inconsistent with the remainder of the bill for dominant carriers by definition will be allowed only a reasonable return on their investment and nondominant carriers presumably will have their profits regulated by competition.

In either case there will be no windfall profits and accordingly no reason to provide a disincentive for investment. On the other hand we support a provision which is designed to reimburse the Commission for the cost of regulation provided this is not interpreted by the Commission as a mandate for ever bigger budgets.

We also believe the statutory scheme for spectrum fees to be unworkable with respect to new and innovative offerings. How do you determine the value of something before it is fully developed?

Moreover, the unintended result of such a provision would be to concentrate radio frequencies in the hands of a few large companies. It would tend to prevent the small entrepreneur from taking his risk.

We also believe that a provision which provides a cap on scarcity value for certain licensees and not for others is an unreasonable discrimination especially when it is those licensees who are making the most unreasonable profits.

The legislation should also provide that all carriers should have equal and nondiscriminatory access to buildings. Carriers who transmit signals by radio must have access to buildings in order to install internal wiring to bring signals from the rooftops to the customers' premises. New internal distribution technologies are necessary to take advantage of the new high speed distribution systems which will come onstream in the next few years.

We would like all carriers to be assured access and rights of way similar to those other utilities have. Unless this is done the implementation of new technologies will be substantially delayed. We suggest the legislation make it illegal to refuse FCC licensed carriers access to buildings on a reasonably compensatory and nondiscriminatory basis.

The provision concerning unauthorized interception of private communications should also be strengthened. Although section 549 provides some protection against illegal interception, our experience has been authorities are loath to enforce these provisions because of overburdened caseloads. We suggest the establishment of an enforcement unit at the Commission and/or Justice Department whose specific responsibilities will be to enforce the criminal sanctions provided in the law.

Individuals should be authorized to commence civil injunctive and damage actions.

The Commission should be authorized to prevent manufacturers from selling or distributing equipment to unauthorized users which could clearly be used only for that purpose.

I thank you.

[Testimony resumes on p. 1560.]

[Mr. Franco's prepared statement and attachments follow:]

TESTIMONY OF

DON FRANCO, PRESIDENT

MICROBAND CORPORATION OF AMERICA

Mr. Chairman, Members of the Committee, Staff, Ladies and Gentlemen:

We welcome the opportunity to appear before you today to outline the views of Microband Corporation of America on HR 3333 - a bill to rewrite the Communications Act of 1934.

We agree that advances in telecommunications technology require a fresh legislative approach to communications regulations. We applaud the main thrust of the legislation, namely that open competition is a far better regulator of charges and services than is the government. The legislation you are today considering will, if passed into law, have far-reaching effects on America and on every American. We believe it is one of the most significant legislative initiatives Congress has recently considered.

We support legislation which seeks to eliminate cross-subsidization and encourages fair competition and deregulation. We support unfettered interconnection among carriers in order to foster the rapid growth of efficient and economical telecommunications services. We support the attempt to solve a present, real and very serious problem - that of overlapping state and federal regulations. We believe your efforts will result in the creation of a more efficient interconnected national communications service. This is not to say, however, that the legislation cannot be strengthened.

To this end, in the few moments allocated to us, we would like to point out those instances where we believe the proposed legislation could, if adopted, have an opposite effect from that which is intended. In a few other cases, we believe additional provisions are necessary to achieve the worthy goals of the legislation. Our comments will be limited for the most part to those portions of HR 3333 which deal with domestic carrier operations, our area of expertise.

In order that you may gain perspective on our views, however, permit me first to provide a brief background on the Multipoint Distribution Service

("MDS") industry and Microband Corporation of America. We believe that MDS is able to distribute broadband video, data, and facsimile within metropolitan areas more efficiently and at lower cost than other existing media. Among other things, we would like to call your attention to certain problems which may prevent these efficiencies from being realized.

BACKGROUND ON MDS

MDS was created by the FCC in 1963 when it set aside spectrum for the use of common carriers to provide local distribution services to the public. However, due to a typgraphical error in the rules which restricted the maximum bandwidth of any channel to 3.5 MHz (thus effectively ruling out video transmission), no construction permit applications were made until some seven years later (after the Commission had corrected this oversight). Thereafter the Commission adopted operating rules and began issuing construction permits. The first MDS station (Microband's Washington, D.C. facility) was licensed and commenced commercial operations in August of 1973.

A typical MDS system is depicted in Exhibit A. It consists of a fixed station transmitting omni-directionally in the 2150 MHz range to unlimited numbers of fixed receivers located around a metropolitan area. The intelligence transmitted is supplied by the customer and may consist of private television, high speed computer data, facsimile, teletext videodata, slow-scan or freeze-frame video, control information, or any other communication adaptable to analog or digital radio transmission. Generally, it is delivered to the MDS station via satellite and/or by point to point microwave (although it may also be originated directly at the MDS station).

The MDS signal is intercepted by directional receiving antennas, down-converted from the microwave frequency to a lower frequency, and then fed (on

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an unused channel) to a standard television set or to a data terminal or facsimile device. The range of the transmission is usually 25-30 miles depending on the power and elevation of the transmitter, the size and characteristics of the receiving antennas and the existence of a long-of-sight path between transmitter and receiver.

Two 6 MHz channels have been allocated for MDS in the top 50 markets, although no second channel has yet gone on the air. In smaller markets, a 6 MHz and a 4 MHz channel have been authorized. Through these channels, MDS operators are able to locally distribute information at very low cost.

Microband's original market research determined that non-video business communications would be the principal source of revenue for the MDS industry. We have found, as others have since confirmed, that there exists a market for the interstate transmission of various kinds of data communications. Only recently, however, has our industry been in a position to serve that demand. There are now sufficient MDS stations built or under construction - many of which are interconnected via satellite - to make an interstata data communications service network feasible.

At the present time, the MDS industry is licensed to provide service in at least 68 of the largest markets in the United States. See Exhibit B. In addition, we expect some 40 additional stations to be operational in 1979. By the end of the year, we believe that MDS stations will be operational in most of the nation's top 100 markets. With this network substantially in place (only the digitizing, switching and control equipment must be installed), MDS can now serve the business communications market which is just about to explode.

The MDS industry is presently distributing pay-TV programs in most of the markets in which it is licensed. In the vast majority of these markets (we are aware of only one or two exceptions), pay-TV programs are transmitted

only during evening hours (slightly earlier on weekends); late night, early morning and daytime hours have been set aside and are available for business communications. In addition, a subcarrier frequency is available for digital data communications 24 hours per day, 7 days per week and, further, MDS Channel 2 is completely unused.

While most uses to date have involved television, MDS has also been used for data communications for more than three years at the MDS station near the University of Illinois in connection with the Plato computer-based education program developed by the University's Computer Based Education Research Laboratory and Control Data Corporation. Because the downstream channel from the central processing computer and Plato data base to the individual terminal requires high speed wideband capacity, the MDS transmission capability has been found to be ideal. The recipient terminal responds upstream to the computer via the local telephone system.

Reuters has also contracted to use MDS for the distribution of its financial and commodity news service. Reuters' system will feed continuously updated information from New York via satellite to a ground station in Chicago where it will be microwaved to the MDS transmission site atop the Hancock Building. The entire data base, with millions of bits of information, will be constantly transmitted via the MDS station to all of Reuters' subscribers who will access the data base by means of "row grabber" decoders. The Reuters information is displayed on television monitors or transcribed by high speed printers.

Another use of MDS has been in the area of teletext information. The MDS licensee in Philadelphia has been conducting tests for some time using the British-developed teletext system called CEEFAX. Recently, Microband initiated tests using an improved French system called Antiope. That system is able to use digital and microprocessor technology to deliver a large volume of information which can be printed or displayed on a television set.

These are just some of the needs MDS has and can serve at lower cost to the consumer. Many others can be envisioned. Based on our experience, we know that MDS is able to distribute broadband video, data and facsimile within metropolitan areas more efficiently and at lower prices than can other existing media. As such, we have developed and nurtured an important national resource, one which should be rapidly expanded in order that all of the possible benefits, many of which Microband has pioneered, can become generally available to the public.

We built our network the hard way - with relatively limited privately-supplied capital and a very small staff. In all candor, we probably survived only because, at a time when our shareholders were willing to accept significant capital risks, few others wished to enter an untested business. Now that our network is substantially in place, far larger companies than ourselves are seeking to enter the data distribution business. We welcome fair competition, the mainstay of American business. We believe that HR 3333 contains many proposals which will foster that competition and thereby increase consumer demand. However, several aspects of the proposed legislation and some additional matters should be considered by the Committee as it seeks to make available to the public affordable telecommunications services which are diverse, reliable, and efficient.

SUMMARY

We agree that the need is now to rewrite the Communications Act and that such revisions should facilitate the expansion of services by diverse entities

to the American public and encourage competition wherever feasible. To achieve these stated objectives, we believe the legislation should:

* provide all federally licensed carriers with equal and nondiscriminatory access to local reception points;

* provide additional safeguards against cross-subsidization and price abuse engaged in by large carriers affiliated with manufacturing and software entities;

* strengthen the law and enforcement safeguards against unauthorized interception of private communications;

* require interconnection of all carriers;

* not contain disincentives to investment in the form of spectrum use fees.

BUILDING ACCESS

Section 311(a) declares that a major purpose of the proposed legislation is to assure the availability of efficient and diverse communications at reasonable rates so that the public will benefit from the continued improvement in telecommunications services.

There is a major obstacle which must be surmounted if these objectives are to be realized - an obstacle that is not sufficiently addressed in the legislation. It is an issue which, is perhaps the most difficult and expensive problem faced by any non-telephone company. What we are speaking about is the ability of that Carrier to gain access to buildings for the purpose installing, maintaining, connecting and disconnecting telecommunications equipment.

While Section 333 of the Bill, relating to "Pole Attachments," does address the access problem, it is primarily oriented toward telephone service and regulation by the states. Reasonable access to existing poles, ducts, conduits and rights of way are to be afforded carriers if these are not regulated by the states. No provisions are made for means of interconnection which advanced telecommunications service may require (not involving Pole Attachments) or

for guaranteeing building access when state regulation is found to be deficient.

Success of any electronic message service will depend on the carrier's ability to serve a sufficient number of inter and intracity locations. In order to distribute communications to the ultimate user, it is necessary to gain access to the building in which the potential user is located, either to install antennas on the roof or install internal wiring or both. The costs of constructing internal distribution systems are enormous and may be, conceivably, the biggest cost element any carrier will bear in its entire system.

Gaining access and installing internal distribution facilities has been a constant problem for the MDS industry during the last half dozen years. Often a landlord has said, "I'll give you access but I want a piece of your action." While this has usually been in the context of pay TV, it, no doubt, will happen even more frequently with large-scale business communications. Other obstacles also can reasonably be expected to arise if one carrier in a given market obtains exclusive rights to the roofs or ducts of major business centers, thereby preventing other carriers access or making the provision of service more expensive.

We believe that it is in the interest of all non-telephone carriers, as well as the consumer, for the legislation to deal with this problem. The Commission should be specifically empowered, when it finds state regulation deficient, to require building access and internal distribution on a reasonable, compensatory and nondiscriminatory basis so that all carriers will be better able to serve the public. Such a requirement, while spurring competition in the provision of local distribution services, can also be expected to spur the Bell System in its own marketing and service developments. An analogy can be drawn to the Carter Phone decision which opened the flood gates to technological and service innovations, and spurred AT & T to become more

and more efficient in its marketing and service efforts.

We strongly believe that the legislation, at the minimum, should provide that all carriers shall be afforded the same rights of access to buildings and other locations as the local telephone companies. The EMS network of the very near future will constitute a vital pipeline in the nation's business and commerce. The maintenance of that pipeline, free from arbitrary or anticompetitive blockages, is clearly of national concern. It is an end to end service of unquestionably national interest. Just as the legislation places regulation of terminal equipment and devices at the federal level, there is a federal interest in assuring access to buildings to install such devices. Unless access is afforded all carriers, the implementation of new technologies will be substantially delayed. As mammoth as it is, even the Bell System does not possess the resources, to say nothing of the incentives, to rewire all the buildings in a metropolitan area to provide the capability of transmitting and receiving high speed, broadband communications. Other carriers should be given the opportunity to provide these facilities.

Such legislation can solve the access problem by making it illegal to deny building access to any FCC-licensed carrier. Suggested statutory language to that effect is contained in Exhibit C. In any case, this is an area which bears close scrutiny because the Bell System, which alone enjoys unrestricted building access, could use, and we expect will use, the status quo unfairly to its advantage.

ANTITRUST ISSUES AND THE RELATIONSHIP BETWEEN TELECOMMUNICATIONS CARRIERS AND AFFILIATED MANUFACTURING ENTITIES

The proposed legislation provides that "dominant carriers" must deal with

affiliated entities in an "arms length" fashion and provide to others in a in a non-discriminatory fashion products or services provided by the affiliate to the dominant carrier. We are concerned that this approach does not go far enough of the dominant carrier - The Bell System - the historical record of pricing abuse merits a more effective structure than merely requiring an arms length fair access approach. The legislation should provide, in our view, that the Communications Regulatory Commission be empowered and encouraged to adopt additional and different requirements to insure against cross-subsidization by carriers affiliated with manufacturing entities. One such approach would empower the Commission to require that a certain percentage of the outstanding shares of the non-carrier entity be held directly by the public or an independent third party (preferably publicly owned). By establishing such a fiduciary relationship, the chances that parent and subsidiary would, in fact, deal with each other at arms length would be greatly increased. If they did not, they would be subject to shareholder litigation. This is one approach. There are doubtless others. The legislative mandate to the CRC should clearly provide that, if traditional arms length mechanisms do not accomplish their objectives, the Commission shall have broad latitude to fashion others.

Perhaps more importantly, however, HR 3333 does not go far enough in guaranteeing fair competition between big "nondominant" carriers related to equipment manufacturers or software producers and small carrier-only companies like ourselves. We are all aware that several major computer and office supply companies will soon enter the telecommunications carrier business. We have read the public statements of at least one corporate head who has repeatedly stated that the entry of his $5 billion company into the communications carrier business is motivated primarily by a desire to maintain dominence in the manufacturing end of the business. If its telecommunications entity were to

be considered a nondominant carrier, it will be permitted to cross-subsidize and bundle its total offering without violating any CRC regulations. This will give it a big advantage over small companies like ourselves. The result will be that big will triumph over small, to the ultimate detriment of the consumer.

We recognize that the new giants entering the telecommunications carrier business will not possess a statutory monopoly. Because of this the incentives to cross-subsidize between the carrier and manufacturing arms of these entities will, therefore, be even more pronounced. The dominant positions which these corporations enjoy in their equipment supply business will be used as a wedge to drive out competition by companies not similarly affiliated or possessing the resources to engage in large scale equipment development. This carrier-manufacturing combination could well insure the elimination from the market of small carriers like ourselves as well as small equipment manufacturers. Thus, the public will be left with only a few carrier equipment manufacturing giants providing EMS-type services.

We recognize that if market dominence were achieved by a carrier, the Commission might reclassify that carrier as dominant and subject it to a full panoply of common carrier regulation. It is also conceivable that an antitrust action might be instituted against such a carrier-manufacturer engaging in anticompetitive pricing practices. These possibilities will be of small consolation, however, to those driven out of business during the lengthy course of regulatory, administrative and judicial deliberations.

Failure to anticipate these problems in your legislation will most certainly lead to a repetition of the mistakes of the past. There will be a closed club of a few giant corporations only partially competitive with one another. It will also reverse the trend in service and facility innovation started by the Carterphone decision. If we have learned anything in

the last ten years, it is that technological and service innovation is not within the exclusive province of the corporate giants. This lesson should be carried over in your legislation.

The incentives for cross-subsidization are so palpably clear, we believe, that if legislatively mandated separations are not appropriate, the CRC should, at the very least, be given from the outset broad authority to regulate any carrier in its relations with affiliated equipment or software companies which are themselves dominant in their fields. This authority should specifically include, in addition to requiring traditional arms length dealings, the power to order full separation of carrier and manufacturing activities.

THE UNAUTHORIZED PUBLICATION, INTERCEPTION, OR USE OF COMMUNICATIONS

An additional area where we believe the legislation should be strengthened concerns the unauthorized interception of private communications. Problems surrounding the illegal interception of protected communications are with us today and may be expected to grow geometrically as the level of private communications, MDS, and satellite services continue to expand in the years ahead.

Section 549 of the proposed legislation carries over many of the provisions of Section 605 of the present Communications Act. While the FCC has specifically found that MDS and private satellite transmissions are communications which are protected under Section 605, our experience has been that federal officials have been loathe to enforce these provisions because of over-burdened case loads.

We believe, therefore, that the legislation should be revised to provide more meaningful and effective safeguards for private communications. A new Subsection 549(g) should be added authorizing persons injured by violators of

Section 549 to commence civil injunctive and damage actions against the violators. A provision should also be added authorizing the CRC to prevent manufacturers from distributing equipment to unauthorized users. A separate unit at the CPC and/or the Justice Department should be established and funded whose specific responsibility would be to enforce the criminal sanctions of Section 549.

I emphasize again, while this is a growing problem for the MDS industry today, it will be a far larger problem as EMS and private satellite communications expand. As more and more business communications are sent over telecommunications facilities, both the dollars involved and the incentives to engage in unauthorized reception and use of protected communications will multiply. Your legislation should address the problem by providing clear and enforceable safeguards against theft of protected communications.

INTERCONNECTION

Section 323(b) provides that intraexchange carriers must provide interconnection to interexchange carriers upon reasonable request and may not discriminate with respect to rates, terms and conditions of service. We fully support those requirements and believe they should be extended to other carriers. A revised Subsection 323(b) to that effect is found in Exhibit D.

By requiring interconnection by all carriers, the public will benefit from the lower costs obtained from fair competition among diverse service offerings. This will allow the benefits of new business communications services to be provided to the public as soon as they have been developed by innovative carriers and not be delayed or denied by carriers whose facilities are needed for interconnection. Small companies like Microband will be no better off if four big companies refuse reasonable interconnection instead of one. In order to make this requirement meaningful, the CRC should be authorized to

require carriers to unbundle their charges.*

SPECTRUM FEE

Microband does not object to the payment of a fee which is designed to reimburse the CRC for the costs of necessary regulation. Pursuant to the proposed legislation, the CRC will perform a very limited regulatory function with respect to MDS carriers. Accordingly, the costs of regulation should be reasonable.

We are opposed, however, to a separate "spectrum resource fee" which, we believe, provides a disincentive to investment in and development of innovative communications services. Microband is a licensee of the spectrum. An MDS station occupies 6 MHz of bandwidth, the same as a UHF television station. Yet, unlike commercial television, our business is still in its infancy. The entire MDS industry has been in operation for less than 10 years. Our company has only recently become marginally profitable. Other smaller carriers within the MDS industry have yet to achieve that status. It must be remembered that a carrier with gross revenues of $3 million is, in reality, a small business. With respect to MDS carriers, the demand for our services is by no means certain. The imposition of a fee on MDS carriers analogous to that proposed for broadcasters would have substantially delayed the time in which Microband became profitable and virtually eliminated the profitability of other MDS carriers.

Should the legislation nevertheless incorporate this ill-conceived approach, we urge that more extensive reduction in fees be legislatively established

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*There appears to be an inadvertent error in a related section, Section 324(a), which, if uncorrected, could unravel the statutory scheme intended by the bill. While Section 324 appears to be primarily addressed to telephone companies, Section 324(a) grants authority to state commissions to establish charges for "telecommunications service". This is contrary to Sections 321(b) and 424(a), which prohibit state regulation of the rates and terms of telecommunications service. Accordingly, the words "telecommunications service" appearing on line 1, page 53, of the bill, should be revised to read "local exchange telephone service."

EXHIBIT A

2150 MHz MULTIPOINT DISTRIBUTION SERVICE SYSTEMS

TYPICAL MDS METROPOLITAN AREA DISTRIBUTION PATTERN

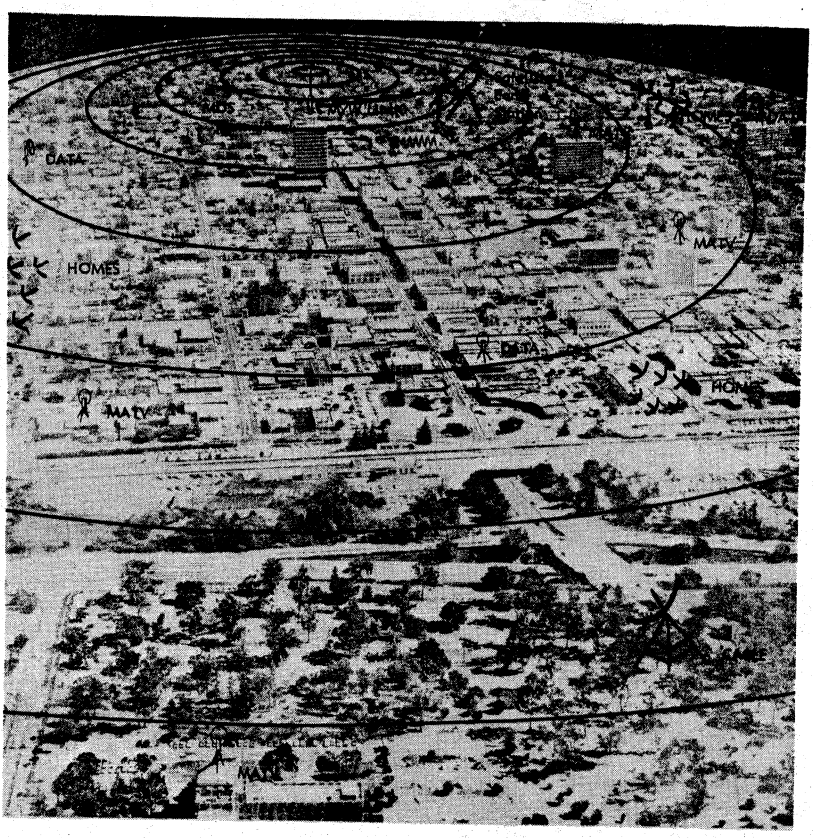

EXHIBIT B

MDS OPERATING STATIONS

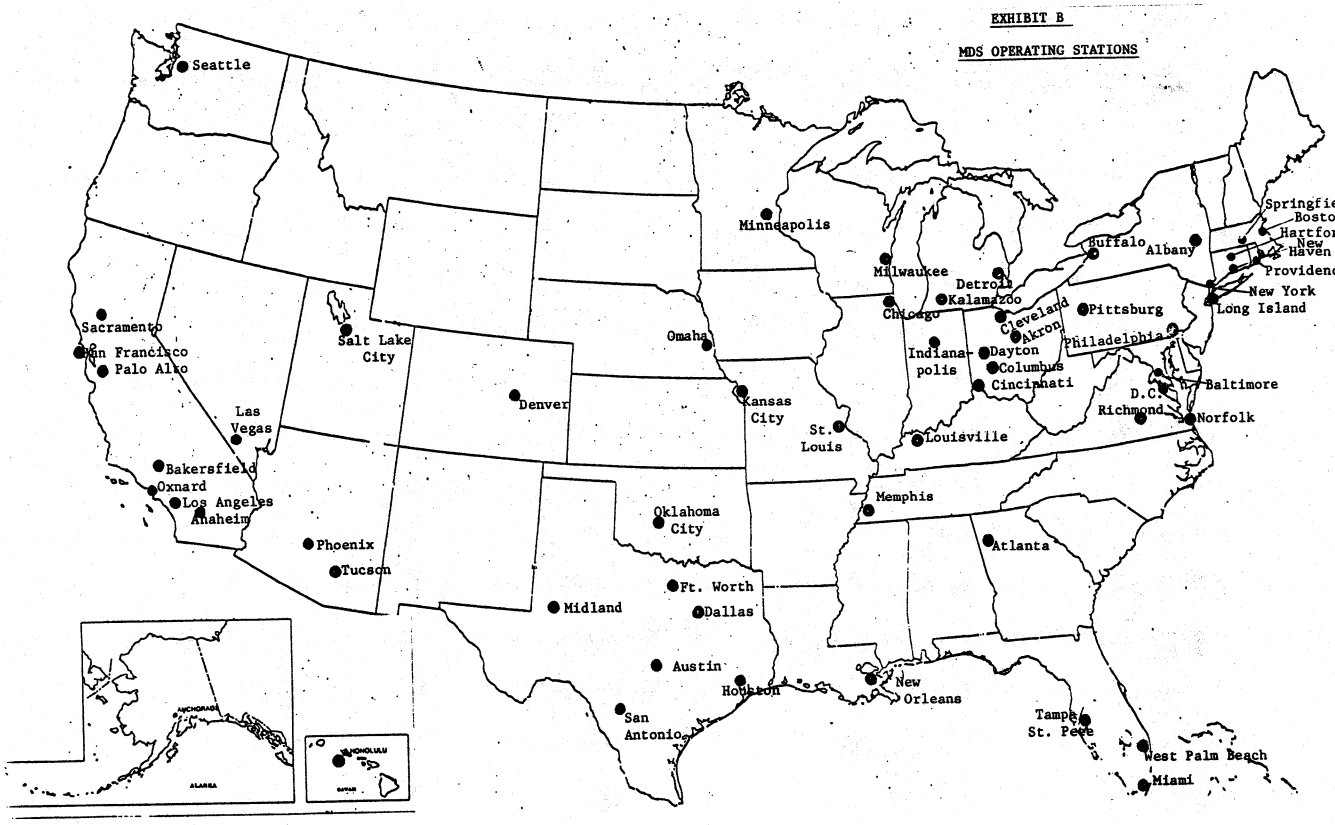

EXHIBIT C

INSURING BUILDING ACCESS

The following language guaranteeing building access should be inserted after the present sentence in Section 321(c):

"In order that carriers may install, maintain, connect and disconnect facilities or equipment for persons requesting telecommunications services, carriers shall be afforded the same rights of access to buildings and other locations as persons providing local exchange telephone services. Any person denying such access to carriers shall be in violation of this section."

EXHIBIT D

REQUIRING INTERCONNECTION BY ALL CARRIERS

In order to assure interconnection among all carriers, Section 323(b) should be revised to read as follows:

"(b) Every carrier shall establish interconnection with any other carrier upon reasonable request. Carriers may not discriminate among carriers with respect to the rates, terms, or conditions of interconnection."

Mr. MOTTL. Thank you very much, Mr. Franco. We will now hear from Mr. Richard Gray.

STATEMENT OF RICHARD E. GRAY

Mr. GRAY. Today I am offering the views of the telephone operating subsidiaries of General Telephone & Electronics Corp. GTE telephone companies utilize the electromagnetic frequency spectrum for provision of intercity private line and message telephone service, mobile telephone service, public air-to-ground service and maritime mobile service. Accordingly, GTE welcomes the opportunity to present its observations on title IV of H.R. 3333.

The effort you are making to reduce Government regulation is a step in the right direction. For instance, the current two step FCC procedure for construction and licensing of most nonbroadcast radio stations is a burdensome and unnecessary process. The one step process set out in sections 412 and 415 should reduce the unnecessary delays arising from procedures under the present act.

Any attempt to ease these regulatory burdens should provide for a practical and efficient process for administration of the frequency spectrum so as to maximize service to the public, but should also avoid the kind of interference problems which gave rise to Federal radio regulation in the 1920's.

In this connection we are concerned that H.R. 3333 gives no opportunity for an interested party to petition for denial of an application for spectrum use even on grounds of interference or potential interference. Provision for a denial procedure is necessary to prevent interruption or degradation of common carriers' services to their customers.

The GTE telephone companies as providers of common carrier services are vitally concerned with the reliability of the facilities utilizing the electromagnetic spectrum.

Thousands of telephone calls, broadcast programs, Defense Department services, among others, may be carried on a single radio facility. There must be a provision for these facilities to be protected from interference.

Additional administrative burdens could be lifted by increasing to 60 days the length of time of operation under special temporary authority where no application is to be filed and 90 days where an application is to be filed for regular operation.

Our experience is that the current 30- and 60-day allowances are not sufficient to permit the completion of Commission processing and public notice requirements. A lengthening of these periods will substantially reduce the need for requests for extensions of time and subsequent STA's.

Another area of concern to GTE as a user of the spectrum is the proposed section 415(d)(l)(A), which would establish in certain instances a system of random selection for frequency assignment. Although possible alternatives to this random selection procedure are found in section 436, these provisions do not specifically take into consideration the qualifications of the potential licensee or the benefits to the public of the service to be provided.

We believe that the best alternative for assignment of such disputed frequencies to qualified applicants is a process based on the importance of the service to be provided to the public. Only

through such a process of careful selection among competing applicants can the maximum benefit to the recipients of telecommunications services be achieved.

Certain language of H.R. 3333 which appears to apply to all users of the spectrum should be restricted at most to broadcast users only. For example, portions of section 413 deal with assignment of specific frequencies, power and location of stations, and zones to be served by stations.

As mentioned earlier, section 415 proposes a lottery for award of unassigned frequencies for which there are multiple applicants. In our view, none of these provisions are necessary or appropriate for common carrier operations.

My comments on proposed section 414, the spectrum resource fee, will be limited principally to the fee's application to common carriers. In a current FCC proceeding, GTE commented that a spectrum resource or scarcity fee for use of electromagnetic spectrum by common carriers is not in the public interest. The basis for this in part is that the public and not the carrier is the true beneficiary of the use of spectrum by a common carrier.

The current allocation/assignment procedures have served the public satisfactorily. A radically different environment resulting from a complete restructuring of the industry could make reexamination of these procedures appropriate.

In our view it is premature to implement a scarcity fee concept prior to the determination of a long-run industry structure. While a spectrum resource fee might prove to be a workable means of spectrum management, there are many areas of uncertainty which must be resolved before it can be fully evaluated.

Thank you.

Mr. MOTTL. Thank you very much, Mr. Gray.

You have heard your colleagues address themselves to these various issues.

Mr. Meehan, do you have any comments?

Mr. MEEHAN. I would like to address a couple of the points which Mr. Roberts raised. First of all, the problems he has posed I would agree are difficult but I do not know that they are insoluable by methods other than auctions or spectrum management fees.

It would seem to me that in a normal rulemaking process, for example, we could determine if manufacturers or utilities needed spectrum in the same area and really who had the best case. Probably it would be taking and splitting it down the middle. All of the problems he has suggested, it seems to me, can be solved by means other than a spectrum management fee or an auction. Although, I would agree if, for example, we had Con Ed and IBM bidding on frequencies in New York, somebody with the deeper pocket is going to solve that problem for the regulator. I do not know that is going to be the best solution.

The other example of whether we should implement single sideband or trunking, they both may offer efficiencies for some types of licensees and for others they may be terrible. I think the key is the word that Paul used, before you implement these things they have to be "practical". Before you go ahead and say we are going to have trunking or you will use single sideband, I think it has to be

demonstrated again through rulemaking, testing and any number of things like that, that these are practical solutions.

One suggestion that I think does have merit for some situations is the trading of licenses. I have a couple of clients right now who would give their eye teeth to trade some licenses in the New York area. They were going to go to 800 MHz conventional systems but they cannot do it now. They are not big enough to go trunked. They only want to have 400 or 500 units per channel or 400 or 500 units. They are now negotiating with our brothers in the railroads for some of their high band frequencies. I suppose it would facilitate if we could buy those licenses or buy those frequencies if somebody was in fact holding them.

I really do not know that would be practical for wide area licensees, but for in a given community, I think that is a good idea. If somebody is sitting with the license and somebody else needs it worse, then he can buy it.

I also do not think it would be practical for industry-wide applications. For example, right now the utilities are seeking on a nationwide basis frequencies for load management, management of the utility loads. To go and buy up frequencies in every community in the Nation where they wanted to do this would not be practical. I think you would have to have a reallocation situation presumably based on need and band width and these types of things.

I think auctions will be very helpful to the regulator in those situations where he has people of equal qualifications, say two common carriers or two broadcasters, where you know both of them will use the spectrum substantially the same in the public interest and instead of giving the money to the lawyers or to the hearing examiners, have an auction.

In a lot of other areas, I do not know. For example, if you had a police department and a large wealthy manufacturer bidding for the spectrum, would the public interest really be served if he with the deeper pocket would get it. Again, auctions should be applied where they are helpful but, again, I am wondering if we are talking about easing the burden of the regulator or his hearing examiner staff or are we talking about spectrum management?

It seems to me it is relieving the burden of the regulator.

The only other question is, and I did not realize we were going to get into section 549, we were initially somewhat concerned why we had a complete revision of what is now section 605. No. 1, in light of the fact that nothing was done in the last bill and also in 1968 the whole subject was addressed in detail in revision of the criminal code.

The only thing we were concerned with is when you get into including language such as "expectations of privacy," we get into a whole new area of litigation and an area that has been litigated ad nauseum. What is the personal privacy expectation?

If you call me on a telephone, I do not expect you would not be recording my telephone conversation. Why not? Perhaps it would be in your interests and perhaps in the public interest that you are recording my telephone conversation.

We have a number of industries where this is particularly critical. For example, again in the utility industry where people have trouble calls coming in, such as wires down, people being electro-

cuted, gas mains exploding, all these telephone calls are recorded because a lot of times the people will blurt out what happens and hang up. The normal human being on the other end cannot take everything down. This is recorded normally with a beep tone or in fact all of the time with a beep tone.

They want the people to know it is being recorded.

To put any provision in where the utility or the police or the ambulance or whatever have to go through notification like, "is it all right if we record" and back and forth such as the Commission had suggested in docket 20840, it would really place a burden on the utility or police or emergency type operator who is required to record telephone conversations.

I would hope if we get into this substantive area of expectations of privacy, whatever that is, that we would be very careful that we do not prevent some very practical uses of telephone recording or complicate them any further than they are now.

Mr. MOTTL. Thank you, Mr. Meehan. Mr. Franco, would you like to respond?

Mr. FRANCO. On another point and I do not recall whether it was Mr. Bortz or Mr. Roberts who made the comment that he disagreed with the Federal preemption of the regulation of the local portion of an interexchange communication.

I would like to suggest in terms of our experience that we support the present measure. I do not think we as a small company would be here today testifying at all if we were subject to regulation in 50 States on what is in essence interstate commerce. We do not have the staff to mount the various lobbying and legal requirements in 50 State PUC's. Even if we did, the cost of providing our service to the public would be so astronomically increased. We think it is not in the public interest to create unnecessary regulation at the local level of what is in essence interstate or interexchange communications.

Mr. JACKSON. Mr. Chairman, may I follow up on this question?

Mr. MOTTL. Certainly.

Mr. JACKSON. Mr. Gray, does G.T. & E. have any position on this issue, the issue of Federal versus State jurisdiction over local use of radio services?

Mr. GRAY. I am really not prepared to get into that today.

Mr. MOTTL. Excuse me. We will allow counsel to proffer questions to the panel. Mr. Van Deerlin will be back any minute. I have to make a vote so please excuse me.

Mr. JACKSON. I am sorry. Please continue.

Mr. GRAY. There was earlier testimony. I am not prepared to get into that today. I believe there is earlier testimony before this panel on the local versus State versus Federal jurisdiction.

Mr. JACKSON. Mr. Bortz?

Mr. BORTZ. On Mr. Meehan's comment about expectations of privacy, in our full testimony we addressed that in some detail. We share his concern about the issue relating to expectation of privacy and have made some suggestions that we believe could meet many of those objections. It should not be just a personal expectation of privacy. It should be a "reasonable expectation," requiring judicial scrutiny of the circumstances in which the service is delivered, involving not only the individual's expectation, but whether such

expectation is one that society is prepared to recognize as reasonable.

We are also supportive of section 549 because it is much more broadly drawn than, for example, the 1968 act which I believe addressed wire communications only. Section 549 addresses data and nonoral communications as well.

With respect to the jurisdictional issue, this is a very difficult issue as to whether there ought to be Federal preemption or State regulation of these services. We see that when you start drawing lines by technology within a given area, and you divide the regulation is that fashion you can get substantial differences in treatment of services that are really pretty much the same services.

Mr. JACKSON. Would NTIA be in favor of State and local regulation of television broadcasters?

Mr. BORTZ. No. We do not believe that is substitutable for intraexchange telephone service.

Mr. JACKSON. How do you distinguish a pay UHF channel from an MDS firm, they provide analogous services.

Mr. BORTZ. I think this raises issues of the use of MDS. The concept that I think was originally behind MDS was not pay television delivery, but data communications. If we are talking about data communications within a given area, there might be some substitutability for intraexchange services.

Mr. JACKSON. We have in several communities today the use of subcarriers of FM broadcast stations for distribution of digital signals similar to the way such use is proposed for MDS. Would you then turn over to the States the regulation of that function of a broadcast station?

Mr. BORTZ. No. What we are proposing is that you have in the bill some flexibility to address each of these as they come along. When you begin to draw rigid lines—and I believe you have rigid lines either with the approach that you have suggested in your bill or with the approach really we have put forward earlier—which said all intraexchange communications would be regulated at the State level—hybrids are going to form and they are not hybrids that you can now anticipate. That is why we are very supportive of Carlos Roberts' suggestion that the Commission take a look at these services and determine essentially the bounds of regulation which would be appropriate if there is to be any regulation at all. Then that regulation would occur at the State level.

If it were not appropriate and if for example MDS were strictly pay TV services or some of the other examples you have cited, you could look at each of those cases and then I think you could draw a conclusion as to the extent of State regulation. But by being very rigid at this point, you are going to have services whose very configuration will be designed to take full advantage of this separation of regulatory jurisdiction in terms of intraexchange services.

I think you want to avoid that. You do not want to have services designed to fit that. By having the flexibility of Mr. Roberts' suggestion, I think you will avoid that.

Mr. JACKSON. Mr. Meehan, do you want to comment on this issue?

Mr. MEEHAN. As you might imagine with the membership of LMCC encompassing the American Telephone & Telegraph Co., the

independents, the RCC's and a multitude of private users, it has no position as such on preexemption.

Some of the members and primarily many of the users concur with the approach in the bill. Others such as carrier-oriented members feel that in some areas State regulation is required.

As far as LMCC is concerned, I really would not be in a position to do it. I will say the utilities wholeheartedly support the intercity—interexchange approach and placing Federal preemption on all intercity service.

One interesting twist, I noted in your section 549, you stuck with the old language of interstate versus intrastate, unlike what happened in the Senate where I presume they intend to apply section 605 to intercity. There is an interesting complication in the Senate bill with respect to those exchange areas which encompass more than one State.

Does this mean that the Federal Government in section 605 rather than the State laws would govern in those areas? This is something you may want to consider in section 549. There is a multitude of State treatment of so-called right to privacy or telephone recording.

As long as you are examining this, you might want to determine, do we want to preempt from the Federal point of view this telephone recording.

Mr. JACKSON. Mr. Roberts?

Mr. ROBERTS. If I could comment for a minute, I would like to address some of Mr. Meehan's earlier remarks. I certainly agree with him that we do not want to put all of our eggs in any one basket of spectrum management techniques, whether they be economic or otherwise.

I think my point was that we do have some tools in the basket now and those tools have in some instances proven less than adequate, and it would be very desirable to add some more tools to that arsenal.

I certainly am glad he agrees on the desirability of the transferability of licenses and in turn I agree with his point on fees for Government users. I think it would require a little tighter justification on the part of Government agencies of their usage of spectrum if they had to pay a fee or purchase frequencies on the open market.

I differ with him a little bit when we get to actual assignment of channels. The repeated illusion to people with the deep pockets I think is a little bit misleading, because certainly somebody that has deep pockets is not necessarily going to buy up everything they come near. Willingness to buy and the amount of dollars in the bank account are two separate things. Certainly before a purchase is made, you have to have the money in the bank account, but having the money in the bank account does not imply that you are going to buy up all the frequencies that are around.

I think perhaps there may have been some misunderstanding also on the question of reallocation of frequencies between major services. I do not anticipate here that Land Mobile is going to come in and buy up broadcast channels or for that matter that the reverse situation would take place, but rather that the price signals that the broadcasters or Land Mobile interests would send up

as to how much they are willing to pay for channels within their own bands would give the regulatory authority a pretty good clue as to the need for reallocation, if that need should exist. I think it is important to bear those differences in mind.

Mr. JACKSON. Mr. Roberts, there was extensive discussion of section 549 and discussion of what the reasonable expectation of privacy meant and would refer to. Have you looked at that section and do you have any thoughts about what the reasonable expectation of privacy is in mobile communications?

Mr. ROBERTS. Yes, I have looked at it. It is an extremely difficult question to answer and to try to draw a line. It is one of these issues which I think is really a matter of judgment.

My personal opinion viewed from the perspective of someone who works in an agency that might have to enforce these provisions is the final answer to this thing is if you want privacy, you ought to take the technical steps necessary to assure yourself of that privacy. As technology develops it becomes easier and easier and cheaper and cheaper to implement scramblers and other sorts of privacy assurance devices and cost is no longer, in my opinion, a valid reason for not availing yourself of those. Simultaneously as technology develops and scanner receivers and other general coverage receivers become more available, it becomes almost an enforcement nightmare to try to keep those devices off the market or prevent people who have them from tuning in certain frequencies while they are able to tune in others.

Mr. JACKSON. Mr. Bortz?

Mr. BORTZ. Partly in response to questions you asked the previous time we were up here and discussed this, we have looked at some of the services in this area and at the FCC rules that apply to those services. Basically in talking about expectation of privacy, it would seem to me, as to a particular link, if you go to the point of scrambling the signal that there is an expectation of privacy. That would be precluded only in two services from what we can see in terms of analog scrambling. That would be in personal radio and amateur radio services where essentially there have to be clear voice transmission.

In the other services, analog scrambling is allowed. If somebody goes to that point of scrambling, then I think there is an expectation of privacy. Digital scrambling is allowed apparently only in public safety services, and we believe digital scrambling may be allowed in the private operational fixed microwave. There is no digital scrambling in the other areas.

I think that whether or not a signal is scrambled in clearly part of the expectation.

Mr. JACKSON. Mr. Franco?

Mr. FRANCO. In the area of pay television, I think we have a slightly different situation than we are discussing here. No. 1, I think there is an expectation in a person that when he does not pay for the pay television programs he is receiving, he is intercepting these programs illegally. You cannot say otherwise I do not believe.

One of the problems we have faced in this area is that there is a real cost of implementing scrambling and other protective cures. The cost is you have to go out and retrofit everything that has

been done before. It is not as in a point-to-point service where you today can decide tomorrow to go into a scrambled mode. When you have thousands of receivers out in the field, it is almost an impossibility to decide tomorrow to switch over to a scrambled mode. How do you do it?

The cost is a cost that would be passed onto the public. It is a very real cost.

What we have faced as an industry—and I do not know that the STV broadcasters have yet but I suspect they probably will—is there are people that go around selling the equipment so that others can get the programs for nothing. When we go to the various administrative agencies which are charged with enforcing the law, no one from the FCC to the Justice Department really wants to do it.

One of our customers caught a person manufacturing and installing an illegal box. He caught him by having a detective order the service. The man came to his home and installed the equipment. All of this was presented in evidence to the court and the court basically because as I believe because the agencies of the Government did not give it full support for very good reasons, because of caseloads and other more pressing things, it really did not come to anything.

What happens is you encourage more and more of this. I think there is a real expectation when somebody is stealing a pay television signal that he knows what he is doing and he should be punished to the full extent of the law for it.

Mr. MEEHAN. Again we are dealing with practicalities and I think this is the proof of the pudding to support what Carlos has suggested, that if you have a problem with interception and you have a reasonable expectation normally based on money or other considerations, you take technical means. For example, in the petroleum industry all your drilling logs when transmitted are scrambled. That is highly proprietary information. Paul mentioned digital. Up to now utilities have not used digital. As a result of some recent events involving electric utility generation facilities and concern that two-way radio transmissions were monitored, I think you will see the Power Radio Service coming in very rapidly to have the rules change to apply digital to that service.

You have a need that may not have existed 10 years ago. In today's world with different values and different outlooks on what is best for this country and access to equipment that can monitor, you are going to have a changing thing but I think everybody has to row his own boat. If you have a problem instead of running to the Government for a solution, have a little bit of self-help and go the technical route.

Mr. JACKSON. What I hear you and Mr. Bortz and Mr. Roberts saying is that it is so hard to police and control the use of interception equipment, it is so cheap and easy to make such equipment and all the components of such equipment have legitimate uses elsewhere in the economy, and you can buy the parts at places like Radio Shack or electronic parts distributors, radio amateur supply stores, the enforcement burden is overwhelming, and therefore it is better just to let people know what the rules are and to tell them that there is other technology to protect their privacy.

Is that a fair statement of your positions?

Mr. MEEHAN. I would personally concur with that.

Mr. BORTZ. I concur.

Mr. ROBERTS. Yes.

Mr. VAN DEERLIN. When you were talking about the pay television signals, were you talking about both over the air subscription and pay cable?

Mr. FRANCO. I was talking about MDS pay. I suppose the same problem will apply to the other services as well, pay cable as well as STV. I had reference specifically to the provision of pay television via MDS which is in an unscrambled mode.

The point I was trying to make was MDS receivers are tuned to a particular channel, a particular frequency, 2150 megahertz. There is no other use for this particular equipment other than to receive a signal from our station or from another licensee's station.

To permit the manufacture and distribution of this equipment for the purpose of committing an illegal act, it seems to me it should be addressed.

Mr. VAN DEERLIN. Somewhat comparable to gasoline siphoning equipment?

Mr. FRANCO. Yes.

Mr. MEEHAN. Am I permitted one point of surrebuttal? I certainly do not want to tangle with Mr. Roberts on anything, but in our discussion of auctions and their uses and so forth, what I am concerned about if you apply auctions say in the spectrum allocation or spectrum management area, is not that somebody may not have the willingness and a deep pocket, I am concerned that I have somebody with less than a deep pocket who has a real legitimate need for spectrum bidding against somebody who has a deep pocket who might have an equally legitimate concern.

It just does not seem to me to be fair just because somebody has more bucks than the other fellow that he should get the spectrum.

I think auctions are a nice way to eliminate lawyer fees in cases where you have people where they have equal public interest rights and uses. It is just the matter of mox nix who gets it. Use an auction there.

I am concerned and in talking with user groups they are saying, who has all the money in the telecommunications business, the dominent carrier or I certainly do not want to go up against IBM or something like that. Then they say, look at all those little pizza guys down there, they do not have the bucks that I do and maybe that is not such a bad idea.

This utility I was mentioning, for example, it could go and outbid someone and that would be a lot easier than the agony they are going through right now, although I must say the railroad people are very accommodating.

I am concerned that the auction will bring about a lot of injustices and I do not think you can dismiss it by saying just because somebody has a lot of money does not mean they are going to go up and buy spectrum. I am not concerned about that. I am concerned where you have two or three people all contending and maybe that little police department and maybe it is a big police department in New York, they only have a certain budget and maybe they need that spectrum just as well as IBM or whatever the corporation

might be. They certainly do not have the economic wherewithal to compete in an auction or sealed bids or what have you.

Mr. VAN DEERLIN. It was never envisioned that the spectrum fee would be used to exclude public and social uses of the spectrum.

Mr. MEEHAN. I know that. I am not talking of the fees. I am talking of the use of auctions to determine who gets a specific frequency. I realize the public safety people are exempted from fees in your bill. I am not clear they would be exempted from any auction program that the Commission might implement.

Mr. BORTZ. They certainly could be exempted.

Mr. JACKSON. I think it is very clear in the language of H.R. 3333 that the Commission could choose to exempt them and to treat them differently. I read H.R. 3333 as allowing auctions to be used and encouraging auctions to be used exactly in the situation you described as being desirable, where you have three applicants alike and there is no point in wasting money or delaying the delivery of service through a comparative hearing.

When they are different and they serve different public interest values, the Commission has discretion under H.R. 3333.

Mr. BORTZ. This would not be a free-for-all in terms of the fees. There are allocations. I assume auctions, if they were to be held, would be so within an allocation, which is defined for a particular service. You would have a homogeneous group of bidders, so you could use the values obtained from those auctions as one piece of information in reallocation decisions, in which case you might shift from one industrial use to another or from one service to another but I do not think it would be wide open to any service that wanted that frequency.

Mr. MEEHAN. I would hope not. I do think it is a concern and it was a concern of the people we represent and we think it should be addressed. Clearly we do not intend the bad result to come by, but I do think it should be addressed and if not in the language of the Act, at least in the report.

Mr. JACKSON. Would you be willing to supply the subcommittee with language which would articulate both the values and the constraints that are needed to make sure that they do not bring harm?

Mr. MEEHAN. Yes, sir. We will file within the time limit provided in the written statement addressing that point.

Mr. VAN DEERLIN. Mr. Moir, full committee counsel?

Mr. MOIR. Thank you, Mr. Chairman.

I have a few quick questions. Mr. Gray, in your testimony at pages 2 and 3, you talk about longer periods of time for an STA. Is it not pretty much a matter of course that valid STA requests are granted extension and the actual work effort of the Commission's staff is actually milliseconds and yet the value of not giving carte blanche long periods of time in the initial grant is that STA's are for only special purposes. If you need a CP, you go ahead and apply for a CP; and many longer time requests have actually been an abuse of the construction permit process or license process?

Mr. GRAY. In our experience as to the purposes to which an STA is used, as you say, they are special purposes, emergency situations and whatnot. In most cases we have found the necessity for an STA extends beyond the 30-day period.

I think the problem comes in those cases where an application is to be filed. To get an STA for say 60 days and file an application and have that meet the preliminary processing, public noticing and whatnot, and expect to get a system up to speed in that length of time is very difficult. The main problem comes in knowing when an application is to be filed.

Mr. MOIR. In that situation, an STA is not used as a vehicle to initiate a speedy process for a new project at the Commission?

Mr. GRAY. No, it is not.

Mr. MOIR. Mr. Bortz, in your testimony, you discuss the proposed section 549 or the existing section 605. I note and well understand, that on page 1 you talk about your statement merely being an expression of NTIA's views and not the executive branch's views. In your circulation of this testimony did you receive any comments back or were there comments made by the Justice Department on this portion in your testimony?

Mr. BORTZ. We have not received any comments in the circulation of this that have not been taken into account in the editing of the testimony.

Mr. MOIR. None were received?

Mr. BORTZ. There were comments from some agencies.

Mr. MOIR. Not the Justice Department?

Mr. BORTZ. We had no comment from Justice.

Mr. MOIR. Thank you.

One further question. For any of the witnesses here today who might not have an opportunity later, the bill before you in section 3331(d) addresses a prohibition basically on the entry of dominant carriers into cellular communications. There has been some mention of this in the testimony. So any of you have any comments on how the subcommittee should address the monopolistic aspects of cellular communication; some people have said the mere prohibition of an A.T. & T. type of license is sufficient; and other people have talked about splitting up the licensing of the radio spectrum. Other people have discussed the possibility of allowing one individual, or one entity, to be the licensee and sell service time to other carriers.

Are there any comments from any of the panelists here? We will be getting some testimony, possibly tomorrow, on this matter, but it might be helpful to get your views.

Mr. BORTZ. I think the provisions of section 436(a) which suggest when at all possible that there be at least three businesses participating in delivery of the services is the best way to avoid monopolistic endeavors. Then, you do not have to prohibit the participation of a dominant carrier from competition. There might be some significant service advantages in that case but there would be competition.

I think this kind of guidance to the Commission will be very important in cellular, MDS, and other services.

Mr. MOIR. Would you include in that the present proposal for cellular as proposed by the Commission in docket 18262? It would have one entity be the licensee of the 40 MHz; from your comments, I assume it would not be desirable to have that, but in one example, split it in thirds.

Mr. BORTZ. This has to be considered. There are a number of spectrum issues too, and I am not really prepared at this point to comment specifically on the particular proposals before the Commission. Requiring at least three operators, though, is a feasible way.

I think to give consideration to avoidance of monopoly situations is important.

Mr. FRANCO. I would like to make one additional point. We believe in order to create competition to the dominant carrier in that area of communications, namely the local distribution of signals, that it is necessary to keep the dominant carrier out of that business for a period of time, at least until there can be a foothold gained by some other entities.

I think it is especially so in respect to the point I made earlier in the day concerning the access to buildings. We are talking about broadband communications and right now the dominant carrier really is the only entity that can get into customers' premises easily.

If you allow the dominant carrier to add on to that so-called monopoly which is the unlimited access to customers' premises which the rest of us do not have and give it the ability to bring in these cellular systems at the same time, I think you are going to find in the long run, you are going to be eliminating the possibility of really having a competitive atmosphere. You are going to enable it through its monopoly of those premises to drive out the competition.

Mr. MOIR. The reason I raised the point is that the Commission, in its docket, had as a premise the concept that cellular service had to be offered as a monopoly service because of spectrum efficiency reasons. There has been considerable discussion since that pronouncement as to whether that is in fact valid reasoning.

It is basically that cellular concept that I am mentioning, and maybe Mr. Roberts could comment on that cornerstone of the docket 18262 proposal.

Mr. ROBERTS. I think the Commission decision, made in light of the prevailing philosophies and policy perspective of that time, is probably correct, but I would hazard a guess that if that decision were to be made today, it might come out a little differently.

I am somewhat concerned that we not waste just about a decade of effort and tens of millions of dollars that have been poured into the cellular development and have to start all over simply to introduce competition.

My position is somewhat in the middle. I would say let's in the future look, as the provisions of H.R. 3333 specify, to having competition in the provision of these services but we are so far down the road in cellular that I think we probably ought to consider some other solutions that might not exclude the monopoly, at least as a base on which perhaps some minimal competition could be added on.

I think to start over now would involve too much delay in the provision of this valuable service.

Mr. MOIR. Some of the proposals we have heard would not involve the scrapping of that docket, but allow for the actual provision of service to be spread over a multiplicity of individuals.

Mr. ROBERTS. I think those deserve very careful scrutiny and we are certainly doing that at the Commission as well.

Mr. MOIR. In your later comments you mentioned you would be filing, will you address this issue?

Mr. ROBERTS. I believe the panelists from the Commission who will be here tomorrow are probably going to concentrate more on that area.

Mr. MOIR. Thank you. Mr. Bortz?

Mr. BORTZ. I just wanted to express some concern, if I understand Mr. Franco's proposal correctly, about access to buildings; this is going to make pole attachment look like playing in a sandbox. It is a very different situation. Regarding access to buildings, I would assume you can arrange to have access with building owners. I hear there is a flourishing business in New York City and other urban locations where business managers apparently make a tidy profit in terms of access to buildings.

I just do not think it is an area of Federal regulation and unlike poles, it is not controlled by someone who can be viewed as a competitor but rather by a multiplicity of private owners. I think that should be a private agreement between the supplier of the service and the building owner.

Mr. FRANCO. On the other hand the statute I think contemplates regulating the terminal and regulating the local aspects of interstate communications. The only thing we are not regulating is that little piece of wire or optical fiber or whatever that comes down from the roof that attaches to the terminal.

I am saying if the intent in this legislation is to bring to the public the great benefits of a new broadband technology, how are you going to get those technologies down to the terminal?

Right now the buildings in this country are wired for narrow band services. If we and other carriers like ourselves who want to bring these broadband technologies into the building and are thwarted by the dominant carrier because only it has the ability to create the State laws that give it the monopoly in the building so to speak, how do we bring in these technologies?

To me there is no difference between having the ability to regulate the terminal and the ability to regulate the wire that connects to the terminal.

Mr. BORTZ. I think substantial freedom for on-premises' wiring is contemplated and it is not going to be an area of detailed State regulation.

Mr. FRANCO. I think even in the pole attachment language that is in the bill, I think you can read some of that language as saying the phone company must provide, if it has a conduit in the building, it must provide an attachment to that conduit. I am not sure that goes as far as we would like it to go. We would like it to say that anyone who forbids access to federally licensed carriers would be in violation of the act.

Mr. BORTZ. I would be concerned about getting into regulation of MATV systems which would be included under that. I think the line has to be drawn somewhat substantially on the other side of that.

Mr. MOIR. Thank you, Mr. Chairman.

Mr. VAN DEERLIN. I thank all of you for this very helpful panel discussion.

[The following letter was subsequently received for the record:]

June 12, 1979

Congressman Lionel VanDeerlin
Chairman
House Communications Sub-Committee
B333 Rayburn House Ofice Building
Washington, D.C. 20510

Dear Chairman VanDeerlin:

I wish to thank your committee for the opportunity afforded our company on June 6, 1979 to present its views with respect to certain aspects of the proposed new Communications Act.

The overriding purpose of your legislative initiative, as we see it, is to spur competition so as to bring to the marketplace technological innovation and to eliminate regulation wherever possible. We agree that these are worthwhile goals. We believe, however, that an issue we raised in our testimony is not fully addressed in the legislation and we are concerned that failure to solve this problem could tend to defeat these worthy purposes. We would like to take this opportunity to amplify on that point here.

Whether provided by us or by others, communications services of the future will tend to be increasingly broadband in order to satisfy the public demand for high speed data distribution. The number of broadband "pipes" available to the public today is growing quite rapidly and the rate of growth will increase dramatically in the years ahead. A great deal of "rewiring" is involved with respect to these broadband pipes because the existing plant (including the interstate and local portions as well as the internal building distribution systems) is not sufficiently wideband to accommodate these new services.

It is with respect to the internal building distribution systems that we perceive the problem to lie. In most cases today, internal building wiring is not adequate for broadband signals. Therefore, unless this wiring is changed, introduction of new broadband services to the buildings in question will be prevented or delayed. In order to make these installations, carriers such as ourselves need to obtain access to buildings. At the present time, only local telephone companies have the unrestricted right to obtain access to all buildings. We believe that this fact will delay the introduction of new and competitive services to the ultimate detriment of the American public. In short, the purpose of the legislation - the introduction of competitive and new technology - will be thwarted.

We believe that it is in the interest of all non-telephone carriers, as well as the consumer, for the legislation to deal with this problem. The law should specifically permit all federally-licensed carriers to obtain access to buildings for the purpose of installing internal distribution systems. Such a requirement, while spurring competition in the provision of local distribution services, can

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also be expected to spur the Bell System in its own marketing and service developments. An analogy can be drawn to the Carter Phone decision which opened the flood gates to technological and service innovations, and spurred AT & T to become more efficient in its marketing and service efforts. For this reason the legislation, at a minimum, should provide that all carriers shall be afforded the same rights of access to buildings and other locations as the local telephone companies now enjoy.

When we presented these views to you at the hearings, a point was raised that while access may be an important issue, it is one that should be addressed at the state and local level. We strongly disagree with this approach.

Your legislation preempts for federal regulation the local portion of interexchange communications as well as the terminals themselves. It seems logical that it should also preempt the wiring to the terminal. In point of fact, there would appear to be an overriding federal interest in seeing to it that the Carrier could gain access for the purpose of installing the equipment. Just as the Congress has seen fit to require mandatory access to pole attachments in the cable television industry, carriers must be granted access to buildings where such is absolutely vital for the provision of their services.

Clearly, the EMS type networks of the near future propose end to end systems provided by communications carriers on a national basis. They are of overwhelming national interest. Moreover, the costs, delays and uncertainties of pursuing a remedy in fifty local jurisdictions - fighting the telephone company at every turn - will substantially delay the provision of new services by all carriers, including Bell.

The result of allowing Bell to maintain the sanctioned status it now has, will be a reduction in competition which is totally inconsistent with the purpose of the legislation. Unless this problem is remedied in your legislation, we are most certainly bound to repeat the mistakes of the past. It requires no stretch of the imagination to believe that the Bell System will use its governmentally-sanctioned monopoly with respect to building access to frustrate the efforts of its competitors.

Attached hereto is our suggestion of the type of language which we believe is necessary to be included in the bill. We wish to have this letter and attachment included in the record of your hearings. More importantly, we respectfully request that you favorably consider our views when reevaluating the proposed legislation.

Thank you for your interest in our industry. If we can ever be of assistance to you or your staff please do not hesitate to call upon us.

Respectfully submitted,

Don Franco

Don Franco, President
Microband Corporation of America

cc: Dr. Chuck Jackson
Staff Engineer

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BUILDING ACCESS

The following language guaranteeing building access should be inserted after the present sentence in Section 321(c):

> "In order that carriers may install, maintain, connect and disconnect facilities or equipment for persons requesting telecommunications services, carriers shall be afforded the same rights of access to buildings and other locations as persons providing local exchange telephone services. Any person denying such access to carriers shall be in violation of this section."

Mr. VAN DEERLIN. Our first of the individual general witnesses will be Mr. Val J. Williams, president of the National Association of Business and Educational Radio.

STATEMENT OF VAL J. WILLIAMS, PRESIDENT, NATIONAL ASSOCIATION OF BUSINESS AND EDUCATIONAL RADIO

Mr. WILLIAMS. My name is Val J. Williams, president of the National Association of Business and Educational Radio, better known as NABER. NABER represents the more than 125,000 business radio users licensed by the FCC and also and very important for this discussion the thousands of two way mobile radio dealers and service stations which sell and provide maintenance for land mobile radio systems.

On their behalf, each of these two elements, I am grateful for the opportunity to testify briefly on a couple of issues in H.R. 3333 that are of keen interest to our members.

Generally speaking, NABER's membership consists of small businessmen who face competition every day. They thrive on the challenge. In an era of regulatory redtape, it is encouraging that this bill advocates marketplace forces as the basic regulator instead of Government intervention. Therefore NABER supports the pro-competition thrust of H.R. 3333.

Awhile later I am going to discuss this aspect in conjunction with recent Commission action.

We are also pleased that the bill recognizes, at least in the land mobile area, that to be effective competition must genuinely exist. It is our belief that if the dominant carrier, A.T. & T., were allowed in the land mobile marketplace, it would capture the lion's share of the market and the inevitable result would be no competition rather than the intensely competitive environment that exists today.

We support the exclusion provision set forth in section 331(d). Let me explain the adverse impact that would befall our members if this section were deleted and this primarily applies to the service stations and independent dealers.

A.T. & T. as it has done historically, undoubtedly would provide its own in-house service and maintenance of its radio equipment. Since we believe that because of its very bigness, A.T. & T. would acquire a dominant share of the land mobile market, a substantial portion of the maintenance business would be no longer available to our members.

We are talking about small businessmen who can ill afford to be shut out from a substantial portion of the market they service today. Even if for some unknown reason A.T. & T. were to contract out service/maintenance business, its leverage would allow it to obtain such service at low, noncompetitive prices.

Similarly some of our members who have elected to become licensees of the third party for hire SMR systems would have a rocky road to say the least, trying to survive against identical systems owned and operated by an A.T. & T. subsidiary. As an investment for the small businessman, these systems represent a substantial risk and for A.T. & T., the amount of money involved would be petty cash.

To summarize, it seems to us that this bill endeavors to establish the ground rules for fair competition and where this is not attainable as in the land mobile field, the bill wisely has elected to retain the highly competitive environment that now exists.

Briefly, we also congratulate the authors of H.R. 3333 for preempting interexchange services and land mobile from State jurisdiction. May I say parenthetically you have saved me about 50 trips a year around the country fighting with these State regulatory commissions.

If the goal of competition as the regulatory yardstick is to be obtained, it is essential to prevent States from imposing their own form of regulation. Even under today's regulatory framework, all too often these local entities establish rules contrary to FCC finding. It is appropriate for Congress to end that practice once and for all.

Finally, I must raise the possibility of another problem that may frustrate the marketplace goals of H.R. 3333 from being realized. That is the FCC or the CRC itself.

As the subcommittee knows, the concept of competition and deregulation is not new. The White House has ordered all administrative agencies to follow this policy. Yet recently the FCC has made decisions and initiated proceedings that will without question reduce the system choices available to the land mobile user and particularly to the small business user even though and again parenthetically the FCC in the 18262 proceedings in the early 1970's and in the middle 1970's said options to users was the primary thrust of 18262.

The FCC uses all the right language about how it intends to promote competition and let marketplace forces be dominent. In reality, what the Commission is doing is changing the marketplace to fit what the FCC thinks it ought to be. In our opinion the FCC is wrong.

Less rather than more competition will result at a higher cost to the user. Right or wrong is not the issue. The point is that if an administrative agency can on its own decide that the marketplace is not working then we will end up with just as much regulation and Government intervention and the only difference will be the words the FCC will use to rationalize its actions.

I hope the Congress and this committee will address this situation and somehow compel the FCC to follow the mandates of H.R. 3333. Regulation is necessary only to the extent marketplace forces are deficient. I added the word "only" and perhaps section 101(a) needs that word added also.

Thank you very much, Mr. Chairman, for allowing me to speak.

Mr. VAN DEERLIN. Thank you.

Mr. JACKSON. I have one question, Mr. Williams. In the third of your three points, you referred to current FCC activities that you felt created problems for users. Could you be a little more specific? I know it puts you in a difficult spot since your organization has to work with the FCC but as diplomatically as you can, could you try to explain what this problem is that you are referring to?

Mr. WILLIAMS. I am really not delicate about it, Mr. Jackson, and I do not have any problem with being at odds with them because I

have been for years on many issues. We are very good friends incidently.

The specific that I am referring to of course is the most recent action by the staff and the Commission, not all of the Commissioners, I might add, in which they in effect closed off private systems applications in the 800 MHz band by denying any further release of the reserve pool frequencies for private systems and insisting that trunk systems be developed before any more private considerations would be made.

This is arbitrary and capricious because first of all there is a tremendous amount of spectrum available for private systems by the very action of 18262. Second, to force everybody to go to a one offering when the whole thrust of the issue of the proceeding was choice of services is just really going out of the context of what I think a regulatory commission is allowed to do.

What they have done is impose more regulation than less.

Mr. JACKSON. Thank you.

Mr. VAN DEERLIN. Thank you very much, Mr. Williams.

Our next witness is Mr. Nathan B. McClure, president of Associated Public Safety Communications Officers.

STATEMENT OF NATHAN D. McCLURE III, PRESIDENT, ASSOCIATED PUBLIC SAFETY COMMUNICATIONS OFFICERS, INC., ACCOMPANIED BY ERNEST J. LANDREVILLE, EXECUTIVE DIRECTOR

Mr. MCCLURE. Thank you, Mr. Chairman and members of the subcommittee and members of the staff.

My name is Nathan B. McClure III. I am the coordinator of the Winnebago County Emergency Services and Disaster Agency in Rockford, Ill. I am the president of the Associated Public Safety Communications Officers, Inc., APCO, on whose behalf I am appearing before you today to discuss H.R. 3333, the Communications Act of 1979.

I am accompanied today by Mr. Ernest J. Landreville, APCO's executive director.

Last September I had the honor and the privilege of appearing before this committee to discuss APCO's views on H.R. 13015, the proposed Communications Act of 1978. Mr. Chairman, you can be assured that in reporting to APCO's membership on my appearance, I stressed your stated concern and support for public safety use of radio, in suggesting that APCO members maintain their active involvement in this historic legislative process. My appearance today is representative of that continuing commitment to your committee's efforts by the APCO membership.

I might add, Mr. Chairman, that we are particularly pleased you have accepted our invitation to be our keynote speaker at our annual conference in Sacramento next August. We expect that public safety communications organizations from all across the country will be present to benefit from your statement.

One will quickly recognize on even a cursory reading of H.R. 3333 that substantial modifications and, in APCO's view, improvements have been made to the provisions of the bill which will govern the use of the radio spectrum by land mobile and other radio service licensees. On the other hand, despite your express

concerns for the public safety radio services sector, APCO must regretably note the lack of any clear and specific directive to the Commission to recognize and provide for and assure that public safety needs for effective, reliable, and economical telecommunications services will be met.

Underlying my previous testimony to this committee and APCO's general position on any communications legislation, is our concern that the standards for access to and use of the radio spectrum and other telecommunications services applied generally to all other users should not be applied to State and local government agencies and other public safety service organizations. There is nothing in the bill which would assure that channels reserved for emergency use would be continually available even when other licensees might desire their use to meet such contingencies. There is also no direction in this new legislation which assures that the authority allocating or assigning the spectrum will take into account the planning and budgeting delays generally encountered by public safety service users in determining which of several competing services will be provided with spectrum.

In our submitted written statement APCO has suggested appropriate language which could be used in section 101 in the bill as a clear statement of direction by the Congress with regard to the public safety communications services. APCO strongly urges that the committee consider the use of this additional language for inclusion in the legislation which is finally adopted. Such language would govern not only the proposed Communications Regulatory Commission but also the National Telecommunications Administration.

APCO would also urge the committee to consider the need for additional language in section 436, which contains the primary provisions dealing with the spectrum management standards of the new Commission. Requiring the Commission to encourage competition in the provision of public safety radio service systems would wreak havoc, on an interjurisdictional and intrajurisdictional basis, among the providers of public safety services. Requiring public safety services providers to compete on an economic basis for available channels or subjecting the availability of channels for public safety services to the uncertainty of a lottery or other random selection basis would obviously be totally unacceptable. To cure this problem APCO urges the addition of pertinent language to section 436 so that the congressional recognition of and concern for the differences in use of the radio spectrum by the public safety radio services will be clearly reflected in the bill.

APCO is pleased to note that the provisions of section 414 dealing with the spectrum resource fee have been changed in line with our earlier testimony so that the Commission must waive the scarcity value factor of any spectrum resource fee if the user is a State or political subdivision of a State. This is certainly an improvement over the earlier provisions.

This modification has not resolved other serious concerns raised in our earlier testimony. APCO is greatly concerned that the waiver of the spectrum resource fee mandated in the bill extends only to State and local government licensees. Many licensees in the public safety radio services would not qualify as subdivisions of

State or local governments. They are often quasigovernmental or voluntary nonprofit organizations which supplement or substitute for the Government in providing safety services.

The imposition of such fees could significantly impact the ability of such volunteer organizations to provide public safety services to their local communities. A modification to the exemption contained in section 414(a)(2)(A) can and should be made which would limit the availability of the waiver to those providers of public safety services who act on a nonprofit, noncommercial basis.

APCO also believes that it is inappropriate to charge a license fee to licensees who gain no personal benefit from their use of the radio, that is, those whose use of the radio license is for the public benefit in providing public safety services, even a fee based only on the processing costs. You, Mr. Chairman, have recognized in a letter to one of APCO's members that "there seems to be little value and much loss if such agencies were to be included among those who must pay a spectrum license fee and essentially the Government would have been taking money out of one pocket and putting it into another." We would hope that the committee would exempt public safety radio service licensees from all spectrum resource fees.

Mr. Chairman and members of the subcommittee, the value of radio systems in providing public safety services cannot be measured in dollars. Local governments must be assured that the resources necessary to provide services to their communities will be available as needed. This is an historic opportunity for this committee to assure that the radio spectrum will be used in the public interest. On behalf of APCO I urge that you consider such provisions in the final legislation.

Mr. Chairman, to perhaps answer a question before it is asked, we feel the exemption in section 436 from the economic factors is not clear enough. We are asking that Congress direct the Commission to exempt public safety from economic based considerations.

Mr. Chairman, I thank you for the opportunity to appear before you today. APCO looks forward to continuing to work with you and the subcommittee, and with Congress, in the continuing efforts to review and update the Communications Act.

[Testimony resumes on p. 1598.]

[Mr. McClure's prepared statement follows:]

STATEMENT

OF

ASSOCIATED PUBLIC SAFETY COMMUNICATIONS OFFICERS, INC.

ON H.R. 3333

BY

NATHAN D. McCLURE, III

Mr. Chairman, members of the Subcommittee, and members of the staff, my name is Nathan D. McClure, III. I am the Co-ordinator for Winnebago County Emergency Services and Disaster Agency in Rockford, Illinois. During the past year, I have had the pleasure of serving as the President of the Associated Public Safety Communications Officers, Inc. -- APCO -- on whose behalf I am appearing before you today to discuss H.R. 3333, the Communications Act of 1979.

Last September, I had the honor of appearing before this Committee to discuss APCO's views on, and suggested changes to, H.R. 13015, the proposed Communications Act of 1979. Mr. Chairman, I was truly gratified by your stated concern and support for the public safety sector's use of the radio spectrum. You can be assured that in reporting to APCO's membership on my appearance, I stressed this support in suggesting that APCO members maintain their active involvement in this historic legislative process. My appearance today, and this written statement, are representative of that continuing commitment to and support of your Committee's efforts by the APCO membership.

One will quickly recognize, on even a cursory reading of H.R. 3333, that substantial modifications and, in APCO's view, improvements have been made to the provisions of the Bill which will govern the use of the radio spectrum by Land Mobile and other radio service licensees. Certainly, by creating a distinct section of the Bill with separate provisions to govern Land Mobile Radio Services, many of the problems which arose from the provisions of H.R. 13015 which were relevant to the broadcasting services, but which were also made applicable to Land Mobile radio services, have been cured. On the other hand, despite your express concerns that radio spectrum should be available for use by the public safety radio services sector, APCO must regrettably note the lack of any clear and specific directive to the Commission to recognize, provide for, and assure that the needs of public safety radio service users for effective, reliable, and economical telecommunications services will be met.

APCO has made an in-depth review of H.R. 3333. In the pages that follow, I would like to discuss with you APCO's proposals for revising those areas where modifications are necessary beyond those already included in this rewrite of the earlier legislation.

The Communications Act Must Recognize the Requirements of Public Safety Licensees for Reliable Telecommunications Services

Underlying my previous testimony to this Committee, and APCO's general position on any communications legislation, is our concern that the standards for access to and use of the radio spectrum and other telecommunications services applied generally to all other users should not be applied to state and local government agencies and other public safety service organizations. Unlike most other radio services, where full channel occupancy is a sign of full utilization, APCO has noted that some channels allocated to the public safety radio services are fully utilized with very low occupancy, being reserved for use in emergency situations, during civil disorder/natural disasters. No one would suggest that these channels be available on a competitive basis with other licensees when they are needed during an emergency -- yet there is nothing in the Bill which would assure that such channels would be continually available, even when other licensees might desire their use, to meet such contingencies.

Public Safety radio users also face significant planning and budgeting delays in attempting to implement new or improved system designs. No group should understand the delays inherent in funding government projects better than

Congress. Yet no direction is included in this new legislation which assures that the authority allocating or assigning the spectrum will account for such delays in determining which of several competing services will be provided with spectrum.

Two pertinent examples of these unique problems can readily illustrate APCO's concern for the need for further direction in the Bill. Recent events have brought to bear the unpredictability of the need for emergency communications. Snow storms in the North, floods in the South and civil disorder in a major city on the West Coast all increased the requirement for immediately available communications channels. The near-catastrophe at the Three Mile Island nuclear facility focused this need onto a four-state area, as contingent plans for evacuating hundreds of thousands of residents were being formulated by responsible governmental authorities. Channels allocated for such uses might not be utilized for days, weeks or even months in between actual or potential disasters; yet the need to have such area-wide coordination channels available to governmental public safety agencies cannot be seriously questioned.

The problems of long-term planning are graphically demonstrated by the Commission's experience in creating "pool" rather than block allocations for frequencies allocated to Land Mobile services in the 800 MHz Band. APCO stated

the concerns of the public safety sector that channels would be quickly gobbled up by other services, particularly in those urban areas where funds might be more readily available to take advantage of the new technology. Thus few, if any, public safety organizations would be able to move their operations to 800 MHz. The Commission nevertheless decided to abandon its block allocation process and make channels available on a first-come/first-served basis. The results are, not unexpectedly, that a significantly smaller percentage of those channels have been assigned to public safety service licensees than to other radio services.

APCO has contributed to the development of a trunked communications system for use by public safety agencies at 800 MHz. Yet it is not unlikely that public safety organizations in many cities, which could benefit from use of this new technology, will be foreclosed for lack of available channels at the time that the planning, design and budgeting stages of the implementation process are sufficiently complete to allow application for station authorization. In fact, without assurances that channels will be available, few jurisdictions will undertake even the initial stages of development of such a system. The Commission's Private Radio Bureau, recognizing this problem, has recently announced its intention to recommend to the Commission the initiation of a proceeding designed to finally

set aside some frequencies at 800 MHz as a block allocation solely for the use of public safety services.

As we have continually noted, public safety operations entail a responsibility for the protection of life and property, a public responsibility provided on a governmental or quasi-governmental basis. Such operations simply cannot be likened to commercial, nongovernmental user operations for purposes of regulations. A different motivation for using the spectrum is inherent in the public safety sector, and local governments are entitled to assurances that the resources necessary to provide services to their citizenry will be available to meet documented needs.

Congress apparently intends that the spectrum will be regulated to provide for public safety services. It is stated in Section 101 of the Act that Congress finds that the regulation of interstate and foreign telecommunications is necessary in order to "advance. . .the safety of life and property." Yet, as APCO has previously recognized, while the Bill contains this statement of purpose in providing for spectrum regulation, there is nothing in the balance of the Bill which expressly recognizes the need, or otherwise provides, for a regulatory approach which would assure the availability of necessary radio services for use in advancing the safety of life and property. This lack of clear direction in the new regulatory scheme is of major concern to the public safety community.

In APCO's earlier testimony and subsequent correspondence regarding H.R. 13015, APCO suggested appropriate language which could be used in the Bill as a clear statement of direction by the Congress with regard to the public safety communications services. APCO suggested that the additional language should be added as a third finding under Section 101, which would read as follows:

> 3. Promote the advancement of public safety communications services and, in this connection, assure the availability of radio spectrum necessary for public safety services used in protecting life and property in accordance with their unique needs.

APCO strongly urges that the Committee consider the use of this additional language for inclusion in the legislation which is finally adopted. Such language would govern not only the proposed Communications Regulatory Commissior, but also the National Telecommunications Administration.

To the extent that the Committee believes that inclusion of such language at that part of the Bill is not acceptable, then APCO would urge the Committee to consider the need for such additional language in Section 436, which provides the new Commission with statutory guidance as to spectrum allocation standards and management for the land mobile radio services. As presently written, Section 436 is particularly troublesome to the public safety community. It provides that

the Commission, in any rulemaking dealing with spectrum allocation standards and management, shall give substantial weight to the preservation and furtherance of competition in interstate commerce. The Section also provides that in developing rules and technical standards for radio systems,[1/] the Commission must prescribe rules and standards which are designed to ensure that at least three business organizations will be in competition for the provision of radio systems services in each relevant market. Section 436 also requires that if there is more than one applicant for a newly available frequency, the Commission must establish rules for selection among applicants, including selection systems based on the use of frequency coordinating committees, the use of economic-based methods of selection, random selection methods, or any other method or procedure which the Commission considers to be in furtherance of the Act.[2/]

1/ The term radio systems has general usage in the land mobile services to connote systems of private or common carrier licensees which include base, mobile and relay stations. However, the Committee's explanation of this section only discusses proposed new common carrier systems. The use of this term in the Bill should be clarified by adding the words "common carrier" or "commercial" before the term "radio system".

2/ This section presents an apparent conflict with the general provisions of Part IV, Section 415(d)(1)(a). Both Sections would appear to govern the standards for granting new licenses; 415(d)(1)(a), however, limits the Commission's authority to using only a system of random selection, while Section 436(b) gives the Commission broader latitude. Section 415(d)(1)(a) should be clarified to indicate that it does not apply to the land mobile and other radio services.

It is easily apparent that this Section, which contains the primary provisions dealing with the spectrum management standards of the new Commission, contains no directions to, or provisions for the Commission to deal with the distinct, noncommercial, and noncompetitive needs of the public safety radio services for radio spectrum. Requiring the Commission to encourage competition in the provision of public safety radio service systems would wreak havoc, on an inter-jurisdictional and intra-jurisdictional basis, among the providers of public safety services. Requiring public safety services providers to compete on an economic basis for available channels, or subjecting the availability of channels for public safety services to the uncertainty of a lottery or other random selection basis, would obviously be totally unacceptable.

APCO believes that an additional sentence must be added to Section 436 so that the Congressional concern for the use of the radio spectrum by the public safety radio services will be reflected in the Bill. A phrase must be added to Section 436(a) at the end of the first sentence so that the sentence reads as follows:

> The Commission. . .shall give substantial weight to the preservation and furtherance of competition in interstate commerce, and to assuring the availability of radio spectrum necessary for use by public safety communications services in the protection of life and property.

With this addition, other provisions of Section 436 are acceptable, since the Commission's discretion to implement particular selection methods must be exercised within this directive. Additionally, since spectrum allocation authority is placed in the Bill under the NTA, similar language should be included under Part VII of the Bill to the extent that allocations would extend to particular radio services rather than to land mobile services generally.

Only by providing such specific direction can Congress be assured that the needs of the public safety radio services will be met. APCO believes that unless this or similar provision which mandates recognition of the different treatment necessary in spectrum allocation and management standards between public safety and other radio service licensees is included in this Section, the quality and availability of public safety services which utilize the radio spectrum will be significantly impaired.

The Scope of the Exemption from Spectrum License Fees for Public Safety Service Users Should be Expanded and Clarified.

In our earlier testimony, APCO noted what we considered to be two problems with the spectrum license fee suggested by H.R. 13015. First, we were concerned by the imposition on

public safety licenses of fees based on the cost of processing licenses. Second, and of no less importance, we were concerned that the Commission was only permitted, rather than required, to waive the spectrum value portion of the proposed fee for state and local government licensees. We also noted, at that time, that such a waiver would not necessarily apply to all public safety radio service users, and could therefore impact, to a substantial degree, the use of radio services by other public safety licensees.

APCO is pleased to note that the provisions of Section 414, dealing with the spectrum resource fee, have been changed so that the Commission must waive the "scarcity value" factor of any spectrum resource fee if the user is a state or political subdivision of a state. This is certainly an improvement over the earlier provisions. However, this modification has not resolved other serious concerns raised in our earlier testimony.

APCO is greatly concerned that the waiver of the spectrum resource fee mandated in the Bill extends only to state and local government licensees. As APCO has previously explained, many licensees in the public safety radio services would not qualify as subdivisions of state or local governments. Rather, they are often quasi-governmental or voluntary non-profit organizations which supplement or substitute for the government in providing safety services. For example, it is not unusual

for the fire-fighting unit in some areas to be a voluntary non-profit organization which receives part of its funding from a local government and part from outside contributions. Similarly, in many areas of the country, the local emergency medical services organization is a voluntary, non-profit group which is only partly supported from tax funds. Under the provisions of the Bill these licensees, upon whom the payment of spectrum fees could fall hardest due to their limited sources of funding, would be required to pay a spectrum resource fee. We do not overestimate the problem when we state that the imposition of such fees could significantly impact the ability of such volunteer organizations to provide public safety services to their local communities. In attempting to manage the spectrum through "economic" incentives then, the Bill may instead result in a contraction of public safety services available to many communities.

APCO believes that a modification to the exemption contained in Section 414(a)(2)(A) can be made which would limit the availability of the waiver to those providers of public safety services who act on a non-profit, noncommercial basis. APCO would urge that the Committee revise this exemption to read as follows:

> (A) the user is engaged in a governmental, quasi-governmental, or nonprofit public safety activity.

APCO also believes that the FCC's findings with regard to imposing fees, based on the cost of processing a license, on public safety licenses are noteworthy. Notwithstanding the apparent authority to impose such fees, the Commission has consistently found that collection of fees from licensees in the police, fire, local government, and other public safety radio services would be inappropriate. The Commission has determined that requiring licensees to pay a fee for the right to use radio to engage in public safety radio services would discourage participation in these worthwhile activities; on this basis, the fees have always been waived. You, Mr. Chairman, have recognized in a letter to one of APCO's members, that "there seems to be little value and much loss if such agencies were to be included among those who must pay [a spectrum license fee], and essentially the government would have been taking money out of one pocket and putting it into another."

APCO appreciates the Committee's determination to require parties who may obtain a service from the government, in the form of processing of a license, to pay for the value of that service. However, APCO believes that it is inappropriate to charge a license fee to licensees who gain no personal benefit from their use of the radio license, i.e., those whose use of the radio license is for the public benefit in providing public safety services, even a fee based

only on the processing costs. Any monies which are taken to pay license fees will necessarily reduce the amount available to public safety agencies to implement and enhance their radio systems. APCO simply does not find any justification for imposing such a fee. We would hope that the Committee would recognize the validity of the FCC's earlier findings, and exempt public safety radio service licensees from all spectrum resource fees.[3/]

Provisions Should Be Modified In Order That the Bill Fully Meets Congressional Objectives.

There are three sections of the bill which, APCO believes, can with minor modification be improved to more closely reflect Congressional intent as to spectrum use and

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3/ APCO gains no consolation from the well-intended limitations imposed under the Act on the spectrum resource fee applicable to land mobile radio service licensees. Any fee, regardless of its size, drains resources from the limited amount available under budgetary constraints well-known to this Committee for use in public safety radio systems. Such imposition of fees would fall particularly hard on those public safety organizations who have already begun the long, and often arduous process of planning, designing and budgeting a public safety radio system, since such design and budgeting would not have accounted for the imposition of fees, based on the present exemption which has been granted by the Federal Communications Commission. It is not unlikely that fees for large area-wide systems could significantly impact the ability of such systems to implement their proposed designs as scheduled.

spectrum management. The first is Section 422, which generally prohibits the Commission from censuring or otherwise regulating the content of any transmission by any person using or operating any equipment in the broadcast or land mobile or other radio services. The only exceptions to this broad prohibition relate to certain broadcasting practices.

As pointed out by APCO in its earlier testimony, the Commission must have the power to regulate the content of transmissions in the land mobile radio services in two regards. First, the Commission must be able to regulate obscene or annoying and harassing transmissions in the land mobile services area. This is particularly important in the case of shared radio services, where the length and/or types of transmissions could greatly influence the ability of different licensees to use the shared channel.

Perhaps more importantly, however, in making assignments and allocations among radio services, the Commission limits certain channels to certain types of uses. Thus, for example, the Commission may reserve certain channels in the public safety radio services solely for dispatch; other channels may be reserved solely for telemetry, and still others for low powered command/control operations. To the extent that this broad prohibition on censorship and regulation of content

could be read to prohibit the Commission from limiting a licensee's use of an assigned channel in this manner, the ability of the Commission to properly regulate the radio spectrum would be significantly abrogated. It is arguable that Section 413(a)(9) gives the Commission the authority to continue to manage the spectrum on a service-by-service basis by providing the Commission with the power to classify stations and prescribe the nature of service to be rendered by each class and by each station within a class. APCO believes that Section 422 should be clarified to ensure that the power granted in Section 413(a)(9) is not so severely restricted by Section 422 as to be meaningless.

The next section of concern is Section 453(a)(1). This Section is generally a restatement of the first phrase of Section 325(a) of the 1934 Act. However, Section 325 applies to all radio licensees, while Section 453(a)(1), found under Part C of the new Act, would appear to govern only broadcast services. In view of the importance of this provision, APCO believes it should be moved into the general section of Part IV of the Bill.

Finally, APCO notes with interest the extension of the license term for land mobile and other radio services to a term not longer than ten years (Section 432(a)). APCO does not object to the expansion of the license terms to ten years. Our concern, however, is that the CRC will not be able to

maintain an adequate and accurate data base on the state of use of stations in any particular service if the license term is extended for such a lengthy period. During a ten-year license term, many licensees may change their mode of operation, or simply cease doing business. However, unless the Commission is notified of such changes, which will not necessarily be the case, the Commission's data base will not be accurate, and the potential availability of new assignments would not be known.

Under present regulations, a licensee is required to apply via postcard for renewal of his license, generally every five years. While postcard renewals are not totally acceptable to APCO, since they often deter licensees from reviewing and improving their systems to include the latest available technology, they at least maintain a more current data base than the Commission could possibly be expected to attain with a ten-year license period. APCO would urge the Committee's consideration of this problem in determining the license term which will be allowed in the land mobile radio services.

Conclusion.

Mr. Chairman and members of the Subcommittee, the value of radio systems in providing public safety services cannot

be measured in dollars. Local governments must be assured that the resources necessary to provide services to their communities will be available as needed. Requiring public safety service users to compete for, or justify their use of, channels on the same basis as a commercial business radio service user ultimately must result in the overcrowding or unavailability of channels to the police, fire or local government organization and the inability of these organizations to meet their public responsibilities. Rather than encouraging the use of radio in advancing the safety of life and property, the provisions governing land mobile radio services could, in fact, result in the unavailability of the radio spectrum for such advancement.

Unless, and until, the provisions of the Bill are amended to ensure that the different and distinct needs of the public safety radio community are considered in any spectrum assignment and allocation procedures, Congress' intent in providing for regulation will not be met. This is an historic opportunity for this Committee to assure that the radio spectrum will be used in the public interest. On behalf of APCO, I urge that you consider such provisions in the final legislation.

Mr. Chairman, I thank you for the opportunity to appear before you today. APCO looks forward to continuing to work with you and the Subcommittee, and with Congress, in the continuing efforts to review, and update, the Communications Act.

Mr. VAN DEERLIN. Thank you for a very skillful abstracting of a report or statement that will be included in full in the record.

Mr. Jackson?

Mr. JACKSON. I have no questions, Mr. Chairman.

Mr. VAN DEERLIN. Mr. Wunder?

Mr. WUNDER. On page 11 where you talk about the breadth of the exemption and certain public safety users may not be included because of the fact that they would not be State or Governmental licensees, what type of activity do you have reference to? Volunteer fire departments?

Mr. MCCLURE. In many cases the volunteer fire departments or, probably more commonly, the emergency medical services, the local ambulance service is a voluntary, not-for-profit corporation that has no tax base. They exist solely on contributions from the public and in some cases charges but the charges, certainly for the service does not cover the cost of providing the service. These are the types of organizations that would not be exempted the way the bill is currently written.

We suggest on page 12 the language that would correct that.

Mr. WUNDER. Thank you, Mr. Chairman.

Mr. VAN DEERLIN. Thank you. I will see you in Sacramento with a completed legislative package I trust.

The final witness for today is Mr. Herbert L. Massie, superintendent of communications of the Atchison, Topeka, & Santa Fe and chairman of the Radio Liaison Committee of the Association of American Railroads. Welcome to the subcommittee.

STATEMENT OF HERBERT L. MASSIE, CHAIRMAN, RADIO LIAISON COMMITTEE, ASSOCIATION OF AMERICAN RAILROADS

Mr. MASSIE. Thank you, Mr. Chairman.

I presume it was a coincidence that the railroad industry be given the caboose position today.

My name is Herbert L. Massie, superintendent of communications system, Atchison, Topeka & Santa Fe Railroad Co. appearing today on behalf of the Association of American Railroads.

I have submitted for the record a comprehensive statement of the railroad industry on H.R. 3333.

While H.R. 3333 has more nearly brought into focus the private land mobile/microwave segment needs than did H.R. 13015, there are still some concerns which I am glad to have this opportunity to briefly express.

Allocation and assignment of radio frequencies are important issues. While title IV of H.R. 3333 would have CRC responsible for assignments, title VII places the prime responsibility for allocations with NTA. As there appears to be no avenue for user public input to the NTA allocation process, it is recommended H.R. 3333 provide that input perhaps by bringing NTA under the Administrative Procedures Act.

The impact of an assessment of annual spectrum resource fees on a national/international scoped industry is unclear.

License application process fees are reasonable. Incorporation into these fees of scarcity value charges is worrisome. Access to spectrum, now used for railroad land mobile and fixed microwave operations through payment of added fee charges of unknown and

possibly exorbitant amounts based on scarcity value would be of dubious public benefit.

While H.R. 3333 does provide a degree of gradiency in its community land mobile fee criteria one should consider that radios used for terminal and en route train communications employing a single radio frequency will operate in congested urban yard areas, smaller cities and towns as well as vast uninhabited and rural areas.

Likewise parallel microwave systems are used in these same areas. In view of the foregoing and because railroad land mobile frequencies are coordinated nationwide with Canada and are shared by multiple users in the same geographical area, the concept of resource fees appear to the AAR as being extremely complicated if not impossible to apply equitably.

Private radio microwave systems are now basic tools for enhancing the safety and efficiency of railroads. The railroads role in our Nation's economic health and welfare in these times of energy crisis should not be overlooked. Ultimately these resource fees would have to be passed onto the public in increased costs for goods and services as the railroads are a transportation common carrier.

AAR questions as a matter of public policy the use of monetary criteria in deciding private radio spectrum matters or the use of economic strength for deciding by whom radio frequencies will be used.

Section 413(d)(1) by requiring congressional concurrent resolution, could have the effect of freezing the broadcast spectrum in place. To AAR, this would favor one user excessively. As there are many other users of the spectrum whose interests are vital, we recommend this section be deleted.

AAR recommends H.R. 3333 be amended to provide for the Commission to make greater use of coordinating committees. This could reduce time required by Commission staff for processing applications and would fit in with the general theme of deregulation. S. 622 provision for industry coordinators might be studied for inclusion in H.R. 3333.

Mr. JACKSON. Excuse me, Mr. Chairman, if I may interrupt, how could the Commission use frequency coordinators more than is allowed under H.R. 3333?

Mr. MASSIE. How could the industry coordinators be used more than they are today?

Mr. JACKSON. No, more than is allowed for in H.R. 3333.

Mr. MASSIE. Basically H.R. 3333 merely touches on the use of it but it really does not give them any particular status as to how they can be used in the process of licensing or how they can be used in the culmination of the licensing process.

Mr. JACKSON. It leaves to the discretion of the Commission the role of the industry coordinating committees, is that correct?

Mr. MASSIE. What we are looking for is a little more positive direction toward the use of the industry coordinators, a little more definitive back-up to the Commission for their use.

Mr. JACKSON. You are saying the bill mandates their use rather than permits their use?

Mr. MASSIE. Maybe "mandate" is a little strong but at least provide for a broader use and a little more incentive for them to use these coordinators more broadly.

Mr. JACKSON. Would the Commission as H.R. 3333 is written, be able to use industry coordinating committees in the fashion you feel is desirable?

Mr. MASSIE. It is unclear as to how much they could use them. That is our concern. We feel S. 622 has a little more definitive language as to just how they will be used.

Mr. JACKSON. Thank you and excuse me for interrupting.

Mr. MASSIE. AAR is concerned with section 422 of H.R. 3333 dealing with prohibition of censorship and that it is so sweeping that there is a possibility that essential radio operating requirements could be barred.

Mr. Chairman, thank you for the opportunity to appear before your subcommittee.

[Testimony resumes on p. 1619.]

[Mr. Massie's prepared statement follows:]

STATEMENT OF HERBERT L. MASSIE, CHAIRMAN, RADIO LIAISON COMMITTEE, ASSOCIATION OF AMERICAN RAILROADS

My name is Herbert L. Massie. I am Superintendent of Communications, System, of The Atchison, Topeka and Santa Fe Railway Company and, in addition, I am Chairman of the Radio Liaison Committee of the Association of American Railroads (AAR). The AAR is a non-profit organization recognized by the Federal Communications Commission (FCC) as the national radio frequency coordinator for the Railroad Radio Service. This includes (1) the line haul railroads, such as the Santa Fe, Union Pacific, Southern Pacific, and CONRAIL, (2) the short line railroads, such as the Northwest Pacific and the Central of Vermont, and (3) the urban rail mass transit and commuter systems, such as the Long Island Railroad, Chicago Regional Transit Authority, the METRO in Washington, D.C., and BART in the San Francisco area. I am glad to submit this Statement as a contribution to the Subcommittee's deliberations on H.R. 3333.

The AAR was privileged to appear before this Subcommittee to contribute to the discussions that eventually led to drafting H.R. 13015 and again privileged to appear to testify on H.R. 13015. Since those earlier views and recommendations of AAR are already on record with the Subcommittee, I propose not to repeat them in their entirety in the interest of saving time.

However, I would reiterate that the interest of the railroad industry in telecommunications is extensive. The over

400 separate Class I, II and II railroads in the U.S., operating on 324,000 miles of track, virtually interlace and blanket the entire nation with their private telecommunication networks. Together, railroads operate many, many thousands of locomotives, cabooses, on-track and off-track units of work equipment and other types of vehicles, virtually all of which are radio equipped. A number of urban rail rapid transit systems, e.g., New York City and Washington, D.C. subway systems, are also radio equipped under the Railroad Radio Service portion of the FCC Rules and Regulations. Additionally, tens of thousands of portable and hand-held radio units are provided to railroad and rail rapid transit personnel to carry on tasks incident to safe and efficient operations.

It probably would be of interest to the Subcommittee that, as the railroads of the U.S. and Canada are operationally integrated, there is extensive shared use of VHF radio communications spectrum by the two countries to facilitate train "run-through" operations and coordination of train movements along the border. VHF radio frequencies shared by the U.S. and Canadian railroads are assigned from a common block allocation. Specific assignments in the border areas are coordinated by the Communications and Signal Section of the AAR, which serves as frequency coordinator for the railroads of both countries.

Management of radio frequency spectrum resources is, I believe, a large and important task. As a part of its continuing overview of telecommunications, and in its deliberations on H.R. 3333, the Subcommittee should, in the view of the railroad industry, assure itself that the Commission always has the necessary statutory authority and resources to do high quality spectrum management. The use of industry radio frequency coordinators can be of significant assistance and the Commission should be provided with the authority to use those coordinators. In this regard, AAR recommends that appropriate parts of Section 336 Senate Bill S.622 be considered for inclusion in H.R. 3333.

There has been in the past much discussion of the proper applications of "block allocations" of spectrum. Certainly block allocations cannot be justified in all cases, but there are some where it remains essential. This would appear to be the case of the public safety services and is definitely the case of the railroads. Because the latter industry is made up of a nationwide network of railroads, a group of closely related frequencies must be available on a national basis and this is best achievable certainly through a block allocation.

Very much involved in current radio frequency issues are the proposals of the United States for the 1979 World Administrative Radio Conference (WARC). The railroads have a unique

interest in the 1979 WARC because the continued availability of one-third of the spectrum used for their mobile communications is tied to Footnote 287 of the International Radio Regulations. The continued availability of spectrum for fixed microwave communications, on which the railroads are so dependent, is likewise involved in the 1979 WARC actions.

Having made these general observations and incorporated by reference the AAR views already on file with the Subcommittee, the following commentary on H.R. 3333 is submitted in the spirit of helpfulness.

CONCEPT OF REGULATION "TO THE EXTENT MARKETPLACE FORCES ARE DEFICIENT" SHOULD NOT BE EXTENDED TO THE PRIVATE TELECOMMUNICATIONS SERVICES OF THE RAILROADS

The railroad industry depends heavily upon the interconnection with the common carriers for much of its communications and upon the manufacturers for its telecommunications equipments. Therefore, in these areas the AAR concurs with the concept of Section 101 that regulation is necessary "to the extent marketplace forces are deficient."

However, the extension of "marketplace forces" or "market" concept to land mobile and private microwave communication spectrum is, as a regulatory tool, questioned. When it

comes to spectrum for private land mobile and private microwave telecommunications, "marketplace" criteria should not prevail. In the case of the railroads, spectrum is used for safety and efficiency in their operations. Both are very much in the public interest. It is not considered prudent in the view of AAR, that the Congress should permit railroad telecommunications to become embroiled in the proposed "marketplace forces" concept.

MEMBERSHIP OF COMMISSION

Telecommunications is a complex technical field in which technology is frequently the crucial issue in matters coming before the Commission for decision. Yet there seldom has been a Commissioner with a telecommunications and/or electrical engineering background. It is recommended that specific provision be made in H.R. 3333 that at all times there be at least one "engineering" Commissioner serving on the new Communications Regulatory Commission (CRC). Section 212(e) paves the way for this by calling for "balance among professional backgrounds." Because engineering is such an important ingredient to telecommunications, Section 212(e) should, in the view of AAR, be specific on the point.

Section 212(c) provides that Commissioners shall serve only one term of ten years. This provision has two disadvantages in that the CRC can be burdened with a poorly performing

Commissioner for ten years and at the same time a star performer cannot be retained. The present tenure of seven years with potential for reappointment seems to be the best compromise. It would permit new blood to come on to the CRC and concurrently permit reward for outstanding achievement.

AUTHORITY FOR ALLOCATION AND ASSIGNMENT OF RADIO FREQUENCIES NEEDS CLARIFICATION

With access to the frequency spectrum being essential to radio communications, authority for the allocation and assignment of that resource is a substantive matter. The language of Title IV refers to "assignments" as a function of the CRC, but that under Title VII, the NTA is responsible for "allocations." This division of authority has been carried over from H.R. 13015 and is still viewed with alarm. As drafted, H. R. 3333 provides in Section 413(a)(8) that the CRC will "assign" radio frequencies with no reference as to its input to the "allocation" process under the purview of NTA. Last year AAR and others expressed their concern for the lack of provision for public input to the NTA allocation process. However, since H.R. 3333 contains essentially the same provisions, as did H.R. 13015, AAR concludes that there is an overriding interest in concentrating the allocation authority in one office. Assuming this is the case, AAR then would urge that the spectrum allocation actions of NTA be subject to the

Administrative Procedure Act so all interests, public and private, could be heard.

SPECTRUM RESOURCE FEE

Section 414(a) states that "The Commission shall assess an annual spectrum resource fee in accordance with this section for all users of the electromagnetic frequency spectrum licensed by the Commission under the Act. Such fee shall take into account -- (1) the cost to the Commission of processing the license; and (2) the scarcity value of the spectrum being assigned - - - - -." The Commission is authorized to waive the fees under certain specific circumstances. Section 414 goes on to provide a formula for assessing land mobile fees based on the fees assessed to television broadcast stations.

As stated last year, the AAR has never opposed paying a fee for processing its applications. There is, therefore, no objection to the fee schedule proposed in Section 414(a)(1). However, the introduction of a fee based on "scarcity value" is a cause for concern as it would require payment of fees of an unknown and possibly exorbitant amount based on the scarcity value of spectrum now used for hundreds of thousands of land mobile and fixed microwave radio operations. How "scarcity value" will be applied to all these railroad radio operations is not understood because the criteria used in H.R.

3333 is related to communities. Radios used for enroute train communications employ the same frequencies when they depart from a congested urban yard area, pass through smaller cities and towns, cross uninhabited and rural mountain areas and then arrive in a distant congested urban area. Likewise, microwave frequencies are used in areas where there is no scarcity at all in some cases and in urban areas where there is great spectrum congestion. The concept is further complicated because land mobile frequencies are often shared by multiple users in the same geographic area. The application of resource fees appears to AAR as being unrealistic from a practical implementation standpoint. Certainly the intertwining of railroad land mobile operations with multiple UHF television economies would render the computation of annual resource fees an onerous task. In any event, the resource fee assessed would have to be passed ultimately on to the public because the railroads are a transportation common carrier.

AAR QUESTIONS CONCEPT OF TREATING SPECTRUM AS A RESOURCE TO WHICH AN ECONOMIC VALUE CAN BE ASSIGNED

The introduction of the concept of basing fees upon economic considerations such as "scarcity value" or "fair market value of the benefit conferred" raises several questions of a legal and practical nature. There seems to be a tendency by some to compare radio frequencies with natural resources such

as oil, gas or coal. This would be an attempt to compare tangible and measurable resources with an intangible that does not even exist until a transmitter is switched on. The radio frequencies have so many variables that comparison should not be made with a fixed asset. Oil can be measured in barrels, coal in tons and gas in cubic feet, but frequency usage involves many technical considerations, e.g., (a) the order of frequency -- different parts of the spectrum have different characteristics; (b) location and type of antenna -- whether on a tall building or at ground level and whether beamed or omnidirectional; (c) emissions -- pulsed emissions differ from voice. These technical considerations alone indicate how unrealistic it would be to identify frequency usages into individual, neatly defined units such as tons, barrels or cubic feet.

To railroad users, radio/microwave systems are tools for enhancing the safety and efficiency of their activities. The spectrum they use is heavily shared. Private land mobile users range from small businesses to large corporations. Even among railroads, use ranges from the small short-line railroads of only a few miles to large railroad corporations having thousands of miles of track. Under a "scarcity value" situation, the large railroad corporations could possibly pay what is necessary to obtain radio frequencies. What if the small short-line railroads lose out and the "benefit" they

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could have from the use of radio spectrum was lost? How about the well-known situation of the bankrupt railroads that the government is trying so hard to keep going?

"SCARCITY VALUE" APPROACH AS BASIS FOR ESTABLISHING A FEE PROGRAM IS UNSOUND AS A SPECTRUM MANAGEMENT TOOL

The railroads have unique situations that preclude fixing a "scarcity value" on the frequencies they use. The railroads are one of several industries whose rates, charges and activities are regulated by the Federal Government. At times, these regulatory bodies require the use of radio. In the case of the railroads, the Federal Railroad Administration has promulgated radio rules and has funded a study of the industry's use of radio frequencies.

The railroads of the U.S. and Canada share the same radio frequency spectrum. Spectrum usages are very carefully coordinated because of the extensive interface of the U.S. and Canadian railroads throughout the border areas. As one example, the Canadian railroads have rights-of-way across the State of Maine to reach the Eastern Provinces of Canada. These cross-border spectrumsharing arrangements are based on procedural agreements between the U.S. and Canadian governments. Injection of "scarcity values" into the negotiation and coordination of frequencies on an international basis is

unrealistic. While the railroads are not involved as much as other telecommunications interests, in the same vein, the Subcommittee should not disregard effects of international agreements and treaty obligations upon spectrum usage. The International Table of Frequency Allocations is subject to review and updating from time to time, such as will be done by the 1979 WARC. National frequency usages then must be brought into accord with the international agreements. Such spectrum adjustments must be made regardless of "scarcity value." In summary, international considerations mitigate against resource fees and should be taken into account in deliberations on the use of a "scarcity value" concept.

As can be seen from the discussion just above, "spectrum management" is affected by certain considerations that apply regardless of economic considerations. AAR questions, as a matter of basic public policy, whether a monetary criteria in deciding spectrum matters is in the best interest of the public, particularly where the private radio services are involved. The use of economic strength for deciding by whom radio will be used can be self-defeating from the standpoint of benefit to the public.

In the view of AAR, new technology that enhances efficiency in the use of radio frequencies should be encouraged. The opportunity to use radio through improved technology

should be available. In the case of the Railroad Radio Service, frequency channels were split on three different occasions with a resulting benefit to the industry and to the public.

If Section 414 is retained in H.R. 3333, another category should be added to the list of exceptions in Section 414(a)(2) that would read:

> "(d) Where the licensee is engaged in an activity serving the public pursuant to rates subject to approval or to being established by the Federal Government."

OTHER SPECTRUM MANAGEMENT MATTERS

Before leaving the subject of radio frequencies, there are some other provisions in H.R. 3333 that I would like to address.

Section 413(d)(1) proposes that any substantial change in the assignment of spectrum used by broadcast stations must be referred to the Congress and rules to effect such a change are not to take effect unless approved by concurrent resolution. To AAR, this appears as overkill in favor of one user of the spectrum. There are many other users of the spectrum than broadcasting whose interests are vital too. The disadvantage of Section 413(d)(1) is that it has the effect of freezing the

broadcast spectrum in place regardless of changing requirements and technology. Accordingly, deletion of Section 413(d)(1) is recommended.

Reference is made to the use of "random selection" systems in the granting of licenses in Section 415(d)(1)(A)(ii) and Section 436. While the use of "random selection" is optional in Section 436, it appears to be required in Section 415(d)(1)(A)(ii). From the standpoint of AAR, an industry-arranged solution is preferable to "random selection." AAR, as the frequency coordinator for the railroad industry, could handle railroad matters. Furthermore, it is felt the effective use of industry radio frequency coordinators would preclude the need for "random selection" in the private radio services.

The term "newly assigned frequency" is used at least in Section 415(d) and in Section 436. Apparently, the term is intended to have a special meaning in regard to coordination and licensing. A more meaningful term should be used or a definition provided.

Section 436(b)(2) makes reference to the use of frequency coordinating committees. AAR believes this is a step in the right direction and recommends further that H.R. 3333 provide greater status to the industry coordinating committees. The

provisions in Senate Bill S.622 for industry coordinators could be used as a guide for amending H.R. 3333. The coordinating committees could do much to decrease the burdens upon the Commission staff and, if used properly, could cut down the long delays that now exist in processing private land mobile and fixed microwave applications.

PROHIBITION OF CENSORSHIP

Section 422 of H.R. 3333 provides that "- - - - nothing in this Act shall be construed to give the Commission the power to censor or otherwwise regulate the content of any transmission by any person using or operating any equipment for the provision of broadcast services or land mobile or other radio services." Essentially the same provision was included in H.R. 13015, to which AAR had expressed its concern. While the AAR understands the worthy motives of the Subcommittee in drafting Section 422, its language is so sweeping that it excludes essential radio operating regulations, the use of call signs and the types of transmissions permissible in land mobile radio. Such regulations assure good communications and they should be retained.

Section 326 of the Communication Act of 1934 contains wording that the Commission shall not interfere with the right of free speech. AAR recommends that the Subcommittee carry

forward the language of the present Section 326. It appears to the AAR that the drafters of Section 422 in H.R. 3333 inadvertently curtailed an essential provision when the language was changed. The present Section 326 appears to accomplish the purposes of the proposed Section 422.

NATIONAL TELECOMMUNICATIONS AGENCY

AAR concurs with the concept of Title VII of H.R. 3333 that an independent establishment to be known as the National Telecommunication Agency should be established. There are three points in Title VII that we would address, i.e., (1) allocation of electromagnetic spectrum, (2) preparation for U.S. participation in international telecommunications conferences and (3) public input to the development of policy.

The role of NTA in the allocation of spectrum was a matter of concern when AAR commented last year on H.R. 13015. Those concerns appear to be alleviated somewhat in the text of H.R. 3333 if, through the linking of Sections 704(4), 707(a)(3) and 435(a)(1) the scope of NTA is limited to the Federal Government. However, this is not clear. If this interpretation is incorrect, then the AAR concern remains that NTA is to have virtually total or overriding authority in spectrum allocation matters without direct public input.

AAR concurs with Section 704(5), which provides that NTA shall "manage" the preparation for U.S. participation in international telecommunication meetings. This is a substantial improvement over H.R. 13015, which provided for NTA to "prepare and manage" the aforementioned U.S. participation.

U.S. participation in international telecommunications conferences is important to industry as well as to government. AAR notes that in Senate Bill S.622 a provision is made for U.S. industry participation on U.S. Delegations to international telecommunications conferences. A parallel provision in H.R. 3333 is suggested and Section 704(5) would appear to be the appropriate place.

The railroad industry is an example of direct U.S. industry interest in an international telecommunications conference. The railroads are probably effected more modestly than some other U.S. interests with big international telecommunications operations -- yet the railroad interest is great in, for example, the forthcoming 1979 WARC and in telecommunications agreements worked out by the U.S. with the Canadian and Mexican governments. This interest is primarily in the radio frequency area and is substantial because use of VHF radio on the U.S. (and Canadian) railroads rests to a substantial degree on authority contained in Footnote 287 of the International Radio Regulations agreed on at the 1959 WARC.

Retention of Footnote 287 by the 1979 WARC is an important issue for the railroads, as well as certain other land mobile users.

The situation of Footnote 287 is a good example of why some means of public participation in international conference preparatory work, such as the 1979 WARC, is essential. The AAR would like to develop this further for the Record. The VHF frequencies now in use by the railroads were included originally in a band of frequencies that was available for "mobile" communications. At the 1959 WARC three bands were carved out of that mobile band for international maritime mobile use. Included in those bands are 33 of the 91 railroad channels. However, a special footnote (Footnote No. 287) in the 1959 WARC agreement makes it possible for the railroads of the U.S. (and Canada) to continue to use all of their assigned channels. Consistent with Footnote 287, both the FCC and the Canadian government have licensed a quantum growth of railroad VHF communications during the 1960's and early 1970's. In the meantime, however, maritime interests, including the U.S. maritime interests, would like to see the provisions of Footnote 287 withdrawn to release the frequencies involved for maritime use.

The foregoing is cited an an example of an issue involved in international conference preparation that is important to a

significant segment of the American public. Another good example is the treatment of spectrum for private fixed microwave operations. The railroads, along with many others, utilize literally thousands of miles of fixed microwave circuits derived from fixed microwave bands that are essentially saturated in a number of urban areas. So far the U.S. proposals for the 1979 WARC have not only not proposed increased spectrum allocations for the important private microwave service but, in fact, have eroded those allocations. There are ominous indications of even further erosion to those allocations. As indicated, the foregoing cites two examples of how international telecommunication conferences can have an ultimate impact on the American public.

Section 706(b)(7) of H.R. 3333 provides that the Director "shall assure appropriate consumer representation in connection with the development of policy by the agency." While the AAR understands the objective of consumer representation, telecommunications policy has broader ramifications than "consumer" interest. Accordingly, AAR would recommend that Section 706(b)(7) be expanded to include "other interests from the general public and industry."

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On behalf of the AAR and the railroad industry, I thank you for the opportunity to make this Statement for the Record on this most important proposed legislation.

Mr. VAN DEERLIN. Thank you. Your prepared statement will be inserted into the record.

The subcommittee will resume at 9:30 a.m. tomorrow in the Rayburn Building.

[Whereupon, at 3:55 p.m., the subcommittee adjourned to reconvene on Thursday, June 7, 1979, at 9:30 a.m., room to be announced.]

THE COMMUNICATIONS ACT OF 1979

THURSDAY, JUNE 7, 1979

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

The committee met, pursuant to notice, at 9:30 a.m., in room 2322, Rayburn House Office Building, Hon. Lionel Van Deerlin, chairman, presiding.

Mr. VAN DEERLIN. Good morning.

We will start today's session with a panel of experts who will make up, I am certain, in the expertise they bring to bear any lack in the little signs that are in front of them, which look as if I had hand-printed them.

We will be privileged to hear, in order, from Mr. Louis M. Weinberg, who directs business exchange and mobile communications services for A.T. & T.; Mr. Travis Marshall, vice president of Motorola; Mr. Richard Wiley, former FCC chairman, now engaged in private practice; Ms. Nina W. Cornell, Chief of Office of Plans and Policy for the FCC; and Mr. Sherman M. Wolf, President of Zip-Call in Boston, appearing on behalf of the Telocator Network of America.

They have been asked to address themselves to such questions as: Do new technologies and services get adequate access to needed spectrum today? Does H.R. 3333 provide any improvement for spectrum access for new technology?

Should H.R. 3333 treat radio operations of dominant carriers different from radio operations of other business organizations? Would the proposed spectrum fee be workable? Would it improve spectrum management?

Mr. Weinberg, would you care to lead off?

STATEMENTS OF LOUIS M. WEINBERG, DIRECTOR, BUSINESS EXCHANGE AND MOBILE COMMUNICATIONS SERVICES, AMERICAN TELEPHONE & TELEGRAPH CO.; TRAVIS MARSHALL, VICE PRESIDENT, MOTOROLA, INC.; RICHARD E. WILEY, WASHINGTON, D.C.; NINA W. CORNELL, CHIEF, OFFICE OF PLANS AND POLICY, FEDERAL COMMUNICATIONS COMMISSION; AND SHERMAN M. WOLF, ON BEHALF OF TELOCATOR NETWORK OF AMERICA

Mr. WEINBERG. Thank you, Mr. Chairman.

Members of the subcommittee, my name is Louis Weinberg. I am employed by A.T. & T. as director of business exchange and mobile communications services. In that capacity I am responsible for the

land mobile services provided by the Bell System to the general public, including the Advanced Mobile Phone Service, or AMPS, presently in developmental operation in the Chicago metropolitan area.

I would like to begin by thanking the subcommittee for this opportunity to be here today. I have filed a rather complete statement with the subcommittee and I ask it be put in the record.

Mr. VAN DEERLIN. Of course it will be.

Mr. WEINBERG. With that in mind, I would like to spend the brief time allotted to me in describing an exciting advancement in telecommunications technology. Since the end of World War II, futurists have envisioned a communications system that would release one from his or her home or office. Dick Tracy, of course, has had his wristwatch communicator for many, many years, and as far back as the early fifties, Bell asked for a spectrum allocation to provide a high capacity mobile telephone system.

But it was not until 1968 that a chunk of spectrum was returned from Government use to the private spectrum and we could seriously begin to think about meeting the needs of the public on the move. Bell Laboratories scientists at that time came up with a new spectrally efficient approach called cellular communications.

I have outlined a brief history of the ensuing years in my filed statement, but the punch line is, "we now have an actual system under developmental trial in Chicago and it will meet the needs of the public on the move." Frankly, it is great. The quality approaches that of your home or office.

When I am using it, people I call usually do not recognize that I am in a car. User reaction has surpassed even our great expectations, and after spending the time and money to meet this pressing need, you can imagine our surprise and disappointment at the provisions of section 331(d).

That provision prohibits the Bell companies from offering the service we pioneered, developed, and are prepared to implement. With the long list of waiting customers, it makes little sense to exclude the supplier who has developed the most promising technology to fulfill the public's needs.

Furthermore, the continued presence of the Bell System in the market for new radio services will encourage, not discourage, competition.

Last, I believe that if the goal of section 331(d) is to achieve competition in the cellular market, better alternatives are available.

Let me explain. When Jim Olson, our A.T. & T. vice chairman of the board, appeared before this subcommittee, Mr. Moir requested us to comment on two possible alternatives: First, whether the cellular carrier selected for each market area could serve as a system manager, providing cellular facilities to multiple competing carriers who would offer the service to the public; and second, whether the existing 40-megahertz allocation for cellular service could be subdivided in each market area to allow for multiple competing supplies of both facilities and services.

My written testimony briefly discusses each of Mr. Moir's alternatives, with the conclusion that they may be feasible to imple-

ment and that we are willing to consider them as well as the many possibilities which may be suggested by others.

I would like to emphasize, however, that this is a matter which involves many complex technical and economic tradeoffs and many diverse interests, and all of these diverse interests must be considered. Those interests can best be accommodated, we think, through the regulatory process where there is full opportunity for the parties to exchange and discuss their views and proposals.

Certainly the FCC could, without any additional statutory authority, undertake an inquiry in this regard, and we pledge ourselves to be as helpful as possible in assuring that such an inquiry would result in a solution acceptable to all parties.

The question remains, nonetheless, what should this subcommittee do in terms of legislative effort to achieve this goal. Certainly, section 331(d) is not the best approach. Instead, we suggest that a clear statement of legislative intent to foster competition, such as is found in section 436(a), would provide ample assurance that the subcommittee's goals are realized.

In addition, I would urge the subcommitttee to encourage the parties to discuss alternatives under the auspices of the FCC and to arrive at an approach which permits competition in the provision of cellular service while keeping the cost to the public as low as possible.

I would be happy to try to respond to any questions, and I did bring with me today an exhibit that we had put together for the users in Chicago to demonstrate how the system would be used. That is the system under developmental tests now.

There is a 3-minute canned spiel which sort of explains what a cellular system is, with a car running around showing how it would be used. I would invite the subcommittee to either see it now before this discussion or at your convenience afterward. I have someone here who could turn it on for you.

Mr. VAN DEERLIN. Well, that seems fortuitous. Sure. Shall we identify the voice for the record?

Mr. WEINBERG. John Nicholas. I think you will have to walk over here, Mr. Chairman, to see it. There is a little car running around down here [indicating].

[There was a demonstration.]

Mr. WEINBERG. Thank you, Mr. Chairman.

Mr. VAN DEERLIN. Would it work in Cleveland?

Mr. WEINBERG. Yes; we think it will work in Cleveland and in almost any location in the country.

[Testimony resumes on p. 1652.]

[Mr. Weinberg's prepared statement follows:]

STATEMENT OF LOUIS M. WEINBERG,
AT&T DIRECTOR OF BUSINESS EXCHANGE AND
MOBILE COMMUNICATIONS SERVICES

Re: House Bill 3333 - Subcommittee
Panel on Land Mobile Services

General Summary

The purpose of my testimony is to provide the Subcommittee with the Bell System's comments on those portions of House Bill 3333 which concern land mobile services, spectrum resource fees and spectrum allocation. In my testimony, I will respond, first, to the possible alternate market structures for cellular service which Mr. Moir, of the Staff of the Committee on Interstate and Foreign Commerce, asked AT&T to comment on during the testimony, on May 8, 1979, of James E. Olson, AT&T Vice Chairman of the Board of Directors. In addition, I will comment on:

(1) Section 331(d) which would, in effect, prohibit Bell System companies from holding licenses for new radio systems involving the "distribution of signals directly to customers";a/

(2) Section 414 which would authorize annual spectrum resource fees;

(3) Section 424 which would deregulate land mobile services except, apparently, for those offered by a "dominant carrier"; and

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a/ Included in my discussion of this Section will be certain comments on Section 436(a) which requires the Communications Regulatory Commission (CRC) to "prescribe rules and standards which are designed to ensure that at least three business organizations may be in competition in the provision of radio system services in each relevant market. . . ."

(4) Title VII which, among other things, concerns spectrum allocation.

Cellular Service: Market Structure

We recognize that the existing monopoly market structure for cellular services could be viewed as inconsistent with the competitive principles underlying House Bill 3333. Moreover, even under the 1934 Act and the existing FCC rules, the process of selecting a monopoly supplier through comparative hearings could unreasonably delay implementation of the service. Thus, we are willing to work toward alternative market structures, and we believe that those suggested by Mr. Moir may be feasible. We suggest, however, that such an alternative structure could be best accomplished through the regulatory process and we encourage the Subcommittee to use its good offices to promote such a process.

Sections 331(d) and 436(a):
Competition in Land Mobile

We oppose Section 331(d) because the exclusion of the Bell System from providing new mobile services through technology that we have developed would delay and in some cases preclude customers from receiving the benefits of urgently needed service. Moreover, we believe that the continued presence of the Bell System in the market for new land mobile services is necessary to promote competition and technological innovation. Further, we suggest that the goal of insuring continued competition in land mobile, and the goal of achieving a competitive market structure for cellular service, can be achieved under the FCC's existing powers and that the only needed legislative action is a statement of intent to foster competition such as in Section 436(a). We believe, however, that the statement of intent should not include a fixed minimum number of competitors because such limits tend to be applied arbitrarily even when not in the best interests of the consuming public.

Section 414: Spectrum Resource Fees

We oppose the spectrum resource fees proposed in Section 414 of the House Bill. Such fees are not needed for spectrum efficiency. They could add substantial costs to the provision of common carrier services and tend to promote further litigation. Instead we suggest a cost-based approach to fees, or if there are to be fees based on factors other than cost, the fee limit for land mobile should also be made applicable to other nonbroadcast licensees with each such licensee paying the same fee on a per transmitter basis.

Section 424: Deregulation of Land Mobile Services

We have no objection to the provisions of Section 424 which would deregulate common carrier land mobile services. We believe, however, that deregulation should be applied to all land mobile carriers.

Title VII: Spectrum Allocation

In general, we do not object to the provisions of Title VII. We do, however, suggest that in order to insure that all interested parties have an opportunity to present their views on spectrum allocations, the NTA's allocation powers under Section 707 should be made subject to the rulemaking procedural requirements of the Administrative Procedures Act.

Introduction

Mr. Chairman, Members of the Subcommittee, my name is Louis M. Weinberg. I am employed by American Telephone and Telegraph Company (AT&T) as Director of Business Exchange and Mobile Communications Services. In that capacity, I am responsible for the land mobile services provided by the Bell System to the general public, including the Advanced Mobile Phone Service (AMPS) system presently in developmental operation in the Chicago metropolitan area.

I want to begin by thanking the Subcommittee for this opportunity to appear before it and present the Bell System's comments on those portions of House Bill 3333 which concern land mobile services, spectrum resource fees and spectrum allocation.

In my testimony, I will respond, first, to the possible alternative market structures for cellular mobile telephone service which Mr. Moir, of the Staff of the Committee on Interstate and Foreign Commerce, asked AT&T to comment on during the testimony, on May 8, 1979, of James E. Olson, AT&T Vice Chairman of the Board of Directors. In addition, I will comment on: (1) the provisions of Section 331(d) which would, in effect, prohibit Bell System companies from eligibility to hold radio licenses for new

radio systems involving the "distribution of signals directly to customers";[1/] (2) Section 414 which would authorize the CRC to impose annual spectrum resource fees; (3) Section 424 which would deregulate land mobile services except, apparently, those offered by a "dominant carrier"; and (4) Title VII which, among other things, concerns spectrum allocation decisions by the National Telecommunications Agency (NTA).

Cellular Service: Market Structure

Regulatory Background and Existing Rules:

At least since 1949, the Federal Communications Commission (FCC) has sought to respond to a growing public need for land mobile services. These services, such as radiotelephone service to and from persons in automobiles, have been offered to the public for many years by many firms, including Bell System operating telephone companies, independent telephone companies and Radio Common Carriers (RCCs). In recent years, however, limited spectrum

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1/ Included in my discussion of this Section will be certain comments on Section 436(a) which requires the Communications Regulatory Commission (CRC) to "prescribe rules and standards which are designed to ensure that at least three business organizations may be in competition in the provision of radio system services in each relevant market. . . ."

space and other problems have prevented the accommodation of all those who desire such service, resulted in inadequate service quality, prevented the completion of calls, and created other difficulties.

As early as 1958, the FCC described such services as suffering from spectrum "congestion"; by 1962 it found that there was "extreme congestion"; and in 1964 it concluded that there was "acute frequency shortage."[2/] As a result of these problems, many members of the public who desire land mobile services have been unable to obtain them. For example, in most metropolitan areas there are long waiting lists of customers who cannot be served on existing systems and the Bell System alone has a waiting list of over 25,000 potential land mobile customers. In addition, there have been increasingly frequent instances of poor service quality and service blockages. Despite these substantial problems, the FCC was, until the appearance of cellular technology, unable to find a solution which it regarded as suitable.[3/]

The FCC's current efforts to respond to the "widely-voiced"[4/] concern about the deficiencies of land

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2/ Final Report of the President's Task Force on Communications Policy, Chap. 8 at p. 8 (1968).

3/ Notice of Inquiry and Notice of Proposed Rule Making, 14 F.C.C.2d 311, 313-314 (1968).

4/ Final Report of the President's Task Force on Communications Policy, supra, Chap. 8 at p. 40.

mobile radio began in 1968, when it issued a Notice of Inquiry and Notice of Proposed Rule Making to consider the allocation of additional frequency spectrum to satisfy the "burgeoning needs" for such services.[5/] The FCC reiterated that there was already "serious congestion" in such services in major metropolitan areas, and stated that even greater congestion would develop before 1980. It particularly emphasized the importance of developing new systems that could utilize more efficiently the limited spectrum space that could be made available.

On May 21, 1970, after considering extensive comments from AT&T and other interested parties, the FCC issued a First Report and Order and Second Notice of Inquiry that tentatively allocated additional spectrum space for land mobile services, including an allocation for the development and operation of cellular systems.[6/] The FCC repeated its earlier request that all interested parties undertake detailed studies to determine the most desirable usage of the available spectrum space to meet the increased public need for improved and additional land mobile services

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5/ 14 F.C.C.2d 311, 313-315 (1968).

6/ 19 Pike & Fisher R.R.2d 1663 (1970).

to and beyond 1980. It again encouraged the design of new systems that could more efficiently use the limited spectrum space that could be made available.

In response to the Second Notice of Inquiry, AT&T and other parties urged the FCC to confirm its tentative allocation of spectrum space for the continued development of cellular technology. AT&T and Motorola indicated that they had already completed substantial studies regarding the technical feasibility of cellular systems, and submitted detailed proposals for further developmental programs. AT&T emphasized that cellular systems could make high quality and low cost land mobile service available to a wider variety of potential users than is possible through existing systems. The new systems could be constructed in various sizes. They would offer significant advantages of quality, cost and spectrum efficiency over conventional mobile telephone systems. Compared to existing conventional systems, they would greatly reduce the possibility that a customer might be unable to complete a call because all of the channels are in use. Transmission would be clearer and more intelligible than in existing systems. Economical service could be provided to segments of the public which are not now served.

In a cellular system the mobile service area is divided into geographical units called cells. Each cell is served by its own radio and control equipment and is

assigned a set of frequencies, with neighboring cells assigned different frequencies to avoid interference. Cells sufficiently far apart, however, can simultaneously use the same frequencies, allowing reuse of each channel for different conversations many times in a given service area. Further, as the number of customers increases and there is a need for the system to handle more calls, the size of the cells can be reduced to allow for more frequency reuse.

The cellular approach eliminates the need for high-powered radio transmission by carrying the conversation over regular telephone lines from, or to, the cell site nearest the mobile customer. Using low power, the cell site completes the call by radio transmission covering only the small area where the vehicle is traveling. As a vehicle moves from cell to cell, sophisticated electronic switching equipment will transfer the call to the cell site into which the vehicle is moving. This automatic sequence maintains service quality throughout the conversation without interruption.

On May 1, 1974 the FCC issued a Second Report and Order which, among other things, allocated 40 megahertz of spectrum space for the proposed new cellular systems.[7/] Further, to allay any possible fears regarding anticompetitive conduct in connection with the new cellular systems, the FCC imposed a series of stringent restrictions

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7/ 46 F.C.C.2d 752 (1974).

upon their development and operation by telephone companies. Among other things, the FCC placed limitations upon the manufacture of mobile units and cell site radios by such companies and required them to create separate subsidiaries for the operation of cellular systems.

On March 20, 1975, the FCC released a Memorandum Opinion and Order[8/] in which it ruled on various petitions for reconsideration in connection with its May 1, 1974 Report and Order. In this Memorandum Opinion the FCC reiterated that cellular systems are "the best way to meet the potentially large future requirements" for land mobile services. Nonetheless, it stated that "considerable additional" developmental work is necessary before it would prescribe standards for such systems "on a regular basis," and announced that "until further order, only developmental cellular systems . . . [will] be authorized."

Further, although only developmental systems were to be initially authorized, the FCC's 1975 Memorandum Opinion established the fundamental ground rules governing the market structure for future commercial service. Originally, the FCC had determined that only the telephone companies had the resources and technology to implement the service. Thus when the allocation was made in 1974, it was allocated solely for use by the telephone company to provide cellular service. In the 1975 Memorandum Opinion, however,

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8/ 51 F.C.C.2d 945 (1975), aff'd sub nom., NARUC v. FCC, 525 F.2d 630 (D.C. Cir., 1976), cert. den. sub nom., NARS v. FCC, 445 U.S. 992 (1976).

the FCC responded to the interest shown by RCCs in providing cellular service. It determined that "any qualified entity," including RCCs, could apply for cellular licenses. The FCC, nonetheless, continued to find that the service should be provided on a monopoly basis. In other words, although "any qualified entity" could apply for a cellular license, the FCC determined that only one carrier would be granted a license in each market area and that, in the event of more than one qualified applicant for a given area, the ultimate licensee is to be selected by a comparative hearing.

Finally, on March 10, 1977, after extensive proceedings, the FCC granted the Application of Illinois Bell Telephone Company to construct the AMPS developmental cellular system which is now in operation in Chicago.[9/] Together with technical work that is being conducted by Bell Laboratories in Newark, New Jersey, the Chicago trial is an essential ingredient of the developmental program as it has evolved from the Bell System's initial proposals for the evaluation of cellular technology. Likewise, the RCC industry has clearly shown that it intends to be a vital part of the cellular market. For example, an RCC is presently constructing a developmental cellular system in the Washington, D.C. area using technical advice and equipment provided by Motorola, Inc. Similarly, during the testimony before this Subcommittee on May 4, 1979, George M.

9/ See, In Re Illinois Bell Telephone Company, 63 F.C.C.2d 655 (1977), aff'd sub nom., Rogers Radio Communication Services, Inc. v. FCC, 593 F.2d 1225 (D.C. Cir., 1978).

Perrin, President of the RCC's national council, Telocator Network of America, stated that the RCC industry was desirous of obtaining licenses to offer cellular service.[10/]

Possible Alternative Market Structures:

Notwithstanding the foregoing, the Bell System recognizes that although a monopoly structure for cellular service may be appropriate under the Communications Act of 1934, as amended, such a structure could be viewed as inconsistent with the competitive principles of House Bill 3333. Moreover, even under the existing Act and FCC rules, we can see that the process of selecting a monopoly supplier for cellular service in each market area may be injurious to the public because of the lengthy litigation delays inherent in the adversary comparative hearing process. For example, in the air/ground service, which is provided on a monopoly basis with the supplier selected through comparative hearings,[11/] the FCC allocation occurred in 1970 and the comparative hearing processing is still not completed in some locations. Thus, the Bell System is willing to work toward possible alternative competitive market structures which are consistent with the goal of a nationwide high-capacity system, provided that such structures would allow for expedited implementation of service to the public.

10/ Transcript of Proceedings at 92.

11/ See, Report and Order, 18 Pike & Fischer R.R.2d 1501 (1970).

In this regard, when James E. Olson, AT&T Vice Chairman of the Board of Directors, appeared before this Subcommittee, Mr. Moir of your Staff requested AT&T to comment on two possible alternatives: first, whether the cellular carrier selected for each market area could serve as a "system manager" providing cellular facilities to multiple competing carriers who would offer the service to the public[12/] and, second, whether the existing 40 megahertz allocation for cellular service could be subdivided in each market area to allow for multiple competing suppliers of both facilities and service.[13/]

I will begin by commenting on the second alternative. With respect to conventional land mobile services, the FCC has followed a policy of encouraging competition by assigning two separate blocks of frequency in each market area, one to the RCCs and the other to the telephone company. In 1949, when it made its first permanent allocation of land mobile frequencies, the FCC expressly stated that it was assigning separate radio frequencies to RCCs and telephone companies in order to encourage "the development of competing systems, techniques,

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12/ See Transcript of Proceedings at 100.

13/ Ibid.

and equipment."[14/] The FCC continued to follow this policy in subsequent proceedings for the assignment of additional frequencies for conventional mobile systems.[15/] Moreover, in General Telephone Co. of California, the FCC reviewed its policy of licensing both RCCs and telephone companies and concluded that its policy had "proved to be salutary. . . ."[16/]

We do not, however, believe that it would be feasible to implement a similar allocation and licensing policy for cellular service by merely subdividing the existing 40 megahertz cellular allocation among two or more competing carriers in each market area. Such a subdivision would greatly increase the cost to the customer, reduce the potential markets and make it virtually impossible to achieve the goal of nationwide availability of high-capacity service. Because of the substantial investment needed to construct and operate a cellular system, the system must have a broad band of spectrum, such as that allocated by the FCC, in order to provide service at a reasonable cost. With less spectrum, cell sizes must be smaller and reduction

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14/ In Re General Mobile Radio Service, 13 F.C.C. 1190, 1218 (1949).

15/ See, e.g., Second Report and Order on Channel Splitting, 16 Pike & Fischer R.R.2d 957, 963 (1963).

16/ 21 Pike & Fischer R.R.2d 957, 963 (1963).

in cell size occurs earlier, thus substantially increasing the equipment and other costs for a system. Further, although these costs can have less effect on an individual customer if there is a large enough base of customers over which to spread the costs, a reduced allocation tends to restrict the carrier to those markets which have such a large base, thus substantially reducing the areas in which service can be made available.

Nonetheless, we note that under the FCC's existing rules there is a 45 megahertz allocation in reserve for land mobile. Further, our experience to date with the Chicago AMPS trial indicates that it may be possible for a cellular system to provide economically viable service with an allocation in the range of 30 megahertz, albeit at a somewhat higher cost to the public. Thus, it may be feasible, by removing 20 megahertz from the land mobile reserve and increasing the 40 megahertz cellular allocation to 60 megahertz, to have a competitive cellular market structure consistent with the FCC's allocation and licensing policies for conventional systems, e.g., 30 megahertz for a RCC cellular system in each market area and 30 megahertz for the telephone company cellular system in that area.

Furthermore, in order to enhance the economic viability of such a market structure and to foster free

entry into the marketing and distribution of cellular service, we believe that it may be technically feasible to meld the first alternative suggested by Mr. Moir into this structure. In other words, the telephone company's cellular system could, in addition to providing service directly to customers, offer facilities to RCCs who do not choose to participate in the ownership of the RCC System.[17/] Such facilities would of course be offered to such carriers at a price which reflects the reduced cost to the telephone company's cellular operations brought about by the other carriers undertaking the marketing and distribution of the service to its customers.

In such an arrangement it would, of course, be necessary for telephone company cellular operations to be allowed to serve customers as well as other carriers. First, the customer should be given the option of being served by a carrier who has total end-to-end responsibility for the facilities and service. Second, the investment needed for a cellular system is such that carriers are

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17/ Similarly, the RCC's system could, in addition to providing service to customers, offer facilities to RCCs who do not choose to participate in the ownership of that system or to obtain facilities from the telephone company system.

unlikely to undertake it if they are required to depend totally on others for marketing and distribution. Third, the dangers of cross subsidy and anticompetitive conduct that are perceived when a carrier offers both service to the public and facilities to competing carriers, can be avoided by requiring that carrier to offer facilities to other carriers on the same terms and conditions as provided to its own marketing and distribution division. Further, it could be required to separate its marketing and distribution functions with an appropriate accounting system or separate subsidiary, if such subsidiary is necessary, economically viable and able to operate as an integral part of an overall telecommunications operation.18/

Thus, we suggest that it may be feasible to implement the alternative market structures suggested by Mr. Moir and we are willing to work toward those alternatives as well as any others which may be suggested. We want to emphasize, however, that this is a matter which involves many complex technical and economic issues and many diverse interests. There may also be other possible alternative structures which deserve consideration. Thus,

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18/ See the Testimony of Edward Goldstein on May 2, 1979 before the Senate Subcommittee on Communications of the Committee on Commerce, Science and Transportation. Transcript of Proceedings at 906.

we do not want, at this time, to prejudge the issues by endorsing any particular alternative market structure.

We suggest, instead, that this matter, and the diverse interests involved, can best be resolved through the regulatory process where there is a full opportunity for the parties to exchange and discuss their views and proposals. Certainly, the FCC could, without any additional statutory authority, undertake an inquiry in this regard and we are hopeful that such an inquiry would result in a solution acceptable to all parties, including this Subcommittee. Accordingly, we support such an approach and encourage this Subcommittee to use its good offices to encourage the various interests involved to discuss possible alternatives under the auspices of the FCC and to arrive at a market structure which introduces competition in the cellular field while at the same time keeping the cost to the public as low as possible.

Sections 331(d) and 436(a):
Competition in Land Mobile

I have shown earlier that there is, at present, an established public need for new and improved land mobile services. Moreover, we are confident that technology will

soon make it possible for mobile service to include not only vehicular telephones but also the largely untapped market for portable telephony, a telephone in your pocket for example. Nonetheless, because of the severely limited amount of spectrum allocated for existing land mobile systems and the limited capacity of those systems, the public's present and future land mobile service needs cannot be met without the implementation of new, spectrally efficient technology.

We in the Bell System have developed such a technology in the form of the AMPS cellular system which the FCC has found to be ". . . the only proposal now before us which offers the service compatibility and spectral efficiency needed to achieve out objective of a nationwide, high capacity radiotelephone service."[19/] Further, the Bell System AMPS developmental trial is now in operation in Chicago and has proven that the cellular system is technically feasible and responsive to a large public demand for mobile service. Thus, we believe that the system is the harbinger of a truly exciting and dynamic future for land mobile. Indeed, cellular systems may someday become competitive with basic exchange service. Certainly, cellular service could free the consumer from his dependency

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19/ In Re Illinois Bell Telephone Company, 63 F.C.C.2d 655, 657 (1977).

on a stationary telephone location, and through the evolution of portable telephony, would enable him to carry his personal telephone wherever he goes.

In view of the foregoing, we in the Bell System are puzzled, and indeed disappointed, by Section 331(d) which would, in effect, prohibit our operating companies from offering new land mobile services such as AMPS. We oppose the Section because, first, the exclusion of the Bell System from offering new radio services would delay and perhaps in some cases preclude the public from receiving the benefits of improved land mobile service. Certainly, where there are presently long lists of waiting customers, it makes little sense to exclude the supplier who has developed the most promising technology to fulfill the public's needs. Second, the Section is not needed to promote competition in the conventional, i.e., non-cellular, land mobile market. In that market, which has been in existence for 30 years, RCCs have, if anything, proliferated, to wit: they have over 50 percent of the two-way mobiletelephone market and approximately 80 percent of the one-way paging market. Third, the continued presence of the Bell System in the conventional and cellular land mobile markets is necessary in order to insure continued competition and technological innovation. As Charles A. Zielinski, Chairman of the

New York State Public Service Commission, stated in his Testimony before this Subcommittee on May 4, 1979:

> "Our whole effort with the radio common carriers recently, therefore, has been one of trying to make them compete more. The entrance of a telephone company into a market that is characterized by that kind of attitude may be quite healthy. The telephone company may turn out to be the real competitor and the one who helps drive rates down towards marginal costs in that kind of a situation. And from my position I wouldn't want to give that kind of opportunity up lightly."20/

Thus, we do not believe that Section 331(d) is the best approach to insuring competition in land mobile services. Indeed, if it is enacted, it may actually have the opposite result, and it would certainly delay implementation of new and improved services and technology. We suggest, instead, that a clear statement of legislative intent - such as is found in Section 436(a) - would provide ample assurances that regulatory policies would continue to promote competition in land mobile and that efforts would be made by the appropriate regulatory agency to develop a competitive market structure for cellular services. We do, however, suggest that such a statement of intent should not include a minimum number of competitors, such as is presently in Section 436(a). Such fixed limits are

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20/ Transcript of Proceedings at 46.

arbitrary and tend to create artificial market structures despite the fact that their application may not be in the best interests of the consuming public, or, indeed, not even attainable in many markets.

Section 414: Spectrum Resource Fees

Section 414 would authorize the CRC to impose an annual spectrum resource fee on certain licensees who utilize the spectrum. The fee is to be based on: (1) the cost to the Commission of processing the license; and (2) the "scarcity value" of the spectrum assigned under the license. Further, in the case of broadcast and land mobile licenses, the Section includes specific formulas for establishing a limit on license fees. The Section, however, contains no such formula for the fee which would be applicable to other licenses such as common carrier point-to-point microwave authorizations which are used for, among other things, message toll and private line telephone service.

The concept of a fee schedule based in part on "scarcity value" appears to create many more problems than it can solve. First, it is proposed only for certain users of the electromagnetic spectrum thereby suggesting that

spectrum efficiency is not the driving force involved. In fact, scarcity in a given frequency band is not a simple marketplace phenomenon but rather one that is a function of frequency allocation, technology, location, and other variables.

Second, the fees are unnecessary to achieve spectrum efficiencies. Such efficiencies can and have been achieved by carriers who have voluntarily developed technology to optimize their investments in communications equipment and to compensate for the natural limitations of spectrum resources. Further, the FCC's existing rulemaking powers have been utilized effectively to impose spectrum efficiencies through rigorous technical and operational standards.

Third, the proposed fees would add costs to the provision of common carrier services and eventually be reflected in the rates paid by the public. No benefit will have been rendered to the public by this, especially in view of the fact that the effect of fees on spectrum efficiency is, at best, problematic. Finally, the regulatory history of spectrum license fees is filled with extensive litigation concerning "value to the recipient"[21/] and we foresee more of the same should "scarcity value" become a basis for fees.

21/ See, NCTA v. FCC, 415 U.S. 336 (1976), EIA v. FCC, 554 F.2d 1109 (D.C. Cir., 1976) and NAB v. FCC, 554 F.2d 1118 (D.C. Cir., 1976).

Instead of spectrum resource fees, the Bell System suggests frequency license fees based solely on the regulatory costs incurred by the FCC in the licensing process. Such fees should be clearly easier to determine and implement and less subject to controversy. If, however, the Subcommittee believes, albeit we think it erroneously, that fees should be based on "scarcity value" as well as cost, we suggest that the fee limit defined for a land mobile transmitter be extended to microwave and other nonbroadcast licensees with each such licensee paying the same fee on a per transmitter basis. Such a limit per transmitter would insure against any abuse of the legislation such as the imposition of excessive fees on some users of the spectrum.

Section 424: Deregulation of Land Mobile Services

The provisions of Section 424 of House Bill 3333 appear intended to accomplish a twofold purpose: first, to preempt all state regulation of common carrier land mobile service and, second, to allow the CRC to regulate such services only if such regulation is consistent with "the limitations on regulatory authority" imposed in the other portions of House Bill 3333. Presumably, the latter purpose

is designed to limit the CRC's regulatory authority to the powers conferred over "dominant carriers" under Section 322 et seq. of the Bill.

We believe that rate and tariff deregulation of common carrier land mobile services may be appropriate provided that corresponding changes are made to the 1956 Consent Decree so as to allow Bell System land mobile services to be offered in a deregulated mode. In most significant markets there are numerous RCCs competing with each other and with the telephone company's land mobile services. Further, the competition has, as we have already shown, been vigorous and effective. Thus, marketplace forces can be relied on in lieu of regulation in the land mobile market.

It is our position, however, that deregulation should be applied to all carriers who provide the services, and not applied selectively on one carrier or on a particular class of carriers. The provisions of Section 424 which apparently allow for regulation only of "dominant carriers" appear to be intended to protect other carriers from cross-subsidy or predatory pricing. We suggest, however, that the result achieved by this Section, i.e., selective regulation, is unfair and inequitable. It would impose heavy burdens on the ability of the regulated

entity to compete effectively against unregulated entities. For example, while the unregulated entity could offer new services at its unrestricted option, the regulated entity would have to await the lengthy proceedings often incident to tariff approval.

Moreover, selective regulation is unnecessary to protect against misuse of monopoly power and anticompetitive conduct. The provision of House Bill 3333 which guarantee fair interconnection, together with an appropriate accounting system or separate subsidiary, will, we believe, more than adequately protect against cross subsidy and predatory pricing. Thus, we suggest that deregulation of land mobile services should be made applicable to all carriers and that the CRC should not be given the power to impose regulation selectively on one or a particular class of carriers.

Title VII: Spectrum Allocation

Under Title VII the power to allocate spectrum, which has heretofore been exercised by the FCC, is transferred to the NTA. We have no objection to such transfer, although we do believe that the FCC has exercised its allocations powers effectively, and that such powers could continue to be exercised by the FCC or CRC.

In any event, however, we want to emphasize that spectrum allocation is a matter that has a direct and vital impact on users of the spectrum. Thus, they have a legitimate right to have their views heard and considered by the allocation authority. Moreover, users often have important technical information that can benefit the allocation agency. Thus, regardless of which agency has the power to allocate spectrum, its decision-making process should be made subject to the notice and comment rulemaking provisions of the Administrative Procedures Act.22/

Conclusion

Although the Bell System believes that all of the comments in this testimony deserve consideration, I want to conclude by emphasizing, once again, the urgent need for the Subcommittee to reconsider its proposed exclusion of the Bell System from offering new radio services. We have shown that if enacted, the exclusionary provisions of Section 331(d) will have adverse consequences to the public. In particular, it will delay and perhaps in some cases preclude customers from obtaining new and improved services. Moreover, instead of promoting competition in land mobile,

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22/ 5 U.S.C.A. § 551 et seq.

the enactment of the Section may have the opposite result, i.e., less competition and technical innovation in this field.

We understand, and indeed support, the Subcommittee's goal of fostering competition in the conventional and the cellular land mobile markets. We believe that there are feasible alternatives to the present monopoly structure for cellular service, but neither these alternatives, nor increased competition, will result from Section 331(d). Instead, we suggest that, through the regulatory process, such alternatives, and the continued existence of vigorous competition in land mobile services, can be accomplished without exclusion of the Bell System from this market.

Mr. VAN DEERLIN. Thank you, Mr. Weinberg.
Next Mr. Marshall.

STATEMENT BY TRAVIS MARSHALL

Mr. MARSHALL. Thank you, Mr. Chairman.

I want to apologize. I have a bit of an allergy and my voice is not what I would like it to be.

My name is Travis Marshall and I am vice president of Motorola. Motorola is pleased to have the opportunity to present its views on H.R. 3333 and to participate in this panel.

Since our written testimony discusses in some detail our position on many of the specific sections of H.R. 3333, I shall comment briefly on those areas of vital concern to Motorola and the land mobile community.

We support the concept of relying on marketplace forces to provide the telecommunications needs of the citizens of the United States, invoking regulation only when marketplace forces are deficient. The thrust of H.R. 3333 is that competition vying to serve the market will with certain exceptions serve these needs and that competition will regulate itself to insure proper pricing and will be more dynamically responsive to the public than Government regulation can be.

Implict in the pro-competitive thrust of H.R. 3333 is that competition must be fair and that it must be real. In the land mobile radio market, there will be three types of systems: Individual, private dispatch systems operated by the user himself; third-party for-hire dispatch systems, called specialized mobile radio systems, which will usually be trunked; and for the general public there will be cellular systems, which were just described by Mr. Weinberg. They will offer mobile radio-telephone service interconnected into the wire line network.

The committee recognized that to permit entry by the dominant carrier into any facet of this market would, in fact, result in no competition. The individual private land mobile systems, which comprise more than 97 percent of today's mobile radio users, are well-served by a host of competitive suppliers. Their service and maintenance needs are handled by thousands of independent service stations. Many of these would not survive if the dominant carrier were allowed access.

The potential for domination also exists in the newly established specialized mobile radio systems called SMR's. These SMR's are operated by third-party for-hire licensees who in turn serve eligible licensees in the private land mobile services.

SMR's were construed by the Commission and affirmed by the courts to be non-common carriers. Thus, today SMR's could not be licensed to A.T. & T. or its subsidiaries because they are nontariff services. Without section 331(d), which excludes the dominant carrier, small entrepreneurs who attempt to operate such systems could certainly be swept away.

A third area of potential domination exists in the 40-megahertz set-aside for nationwide compatible common carrier mobile radiotelephone systems utilizing a cellular system configuration. The suballocation increases common carrier spectrum by 1,000 percent, or tenfold. The lure of a 40-megahertz allocation which could be

dominated by A.T. & T. because of its vast resources could surely emasculate the small radio common carriers.

Section 331(d) properly assures this continued competitive environment for land mobile by excluding the dominant carrier. In our opinion, this is the only viable remedy. The various other safeguards the bill proposes to protect against such abuses as cross-subsidy will not be effective to prevent the incursion into and inevitable domination of a heretofore highly competitive market.

This provision of H.R. 3333 will make it possible for thousands of small businesses to compete in rendering communications and providing equipment maintenance fully responsive to the needs of all land mobile users.

We also believe that for competition by deregulation to be effective in the land mobile market, there must be preemption to exclude States from enacting legislation or issuing decisions that will thwart the purposes of H.R. 3333. Certainly in the past these jurisdictions have acted contrary to FCC rules and policies, frequently for the purposes of bringing under regulation land mobile systems which the Commission has determined ought to be free from regulation.

It would be regrettable if competition, the cornerstone of H.R. 3333, were allowed to be undermined by individual local decision. We believe that H.R. 3333 properly preempts, leaving only to the States jurisdiction over local exchange rates.

We must point out that the Commission, whether it be the FCC or the CRC, has a basic responsibility to let marketplace forces control, intervening only when those forces are shown to be deficient. While espousing competition and deregulation, the Commission has recently embarked on rulemaking that could restructure the marketplace, creating competition not as it is contemplated in H.R. 3333 but rather as the FCC deems it ought to be.

H.R. 3333 implicitly assumes that in general, a competitive marketplace exists and thereby puts the burden of proof on those who allege that these forces are deficient.

We believe this approach is valid and in the public interest. As evidenced by these recent FCC actions, however, there is a danger that a commission might constantly tinker with existing marketplace forces to produce regulation that reflects its own view of how the marketplace should be structured.

We hope the committee will reexamine this bill in light of this problem and will endeavor to place appropriate constraints on the agency.

A spectrum access fee could be acceptable under appropriate conditions. If, for example, such a fee were applied to all users in a manner that could cause unused or inefficiently used spectrum to be reallocated to growing services such as land mobile, then the fee would have a meaning and purpose through improved spectrum efficiency.

It is clear that spectrum efficiency has not been accomplished in major portions of the spectrum. If a fee structure could accomplish this, it would, I believe, be in the public interest. It would appear that H.R. 3333 leads in this direction.

That concludes my prepared remarks, Mr. Chairman.

[Testimony resumes on p. 1672.]

[Mr. Marshall's prepared statement and attachment follow:]

TESTIMONY OF

TRAVIS MARSHALL

VICE PRESIDENT

MOTOROLA INC.

GENERAL

Motorola Inc. is a leading systems designer and manufacturer of land mobile radio equipment for both private users and common carriers. In the common carrier market, we serve both wireline and radio common carriers. In addition, our company manufactures CB equipment, AM-FM radios for automobiles, systems for the Federal Government and semiconductor devices used in a broad variety of electronic and telecommunications systems. One of our subsidiaries is actively engaged in providing data processing and communications equipment. Thus, our interest in the ramifications of H.R. 3333 is substantial.

Motorola strongly supports the avowed purpose of H.R. 3333 to protect the public interest by government regulation only when marketplace forces are demonstrably incapable of performing this function. (Section 101(b)). The Bill is a welcome step toward an era of greater reliance on competition and the marketplace in determining the development of our nation's telecommunication policy. Competition has already proved to be an effective and cost-efficient regulator in those portions of the communications industry where government intervention has been minimal and in other sectors of the economy such as the recently deregulated airline industry. Where true competition exists and is allowed to operate without government imposed restrictions, both the public and business benefit from the resulting variety of choices in terms of superior quality of products and lower prices. Additionally, we feel that this provision as modified is superior to the equivalent section in H.R. 13015 as it properly recognizes protection of the

public interest as the primary goal of this legislative reform. We anticipate that the CRC and the communications industry, acting within the framework of H.R. 3333, will create an environment in which full and fair competition among equals will prevail with concomitant rewards to the public.

RECOGNITION OF PRIVATE LAND MOBILE

Motorola is especially pleased to note the Bill's explicit recognition of private land mobile as distinct from the common carrier land mobile service as an integral segment of the telecommunications industry. This delineation is both overdue and necessary. Private land mobile systems, which provide internal communication among employees of a business or organization now comprise approximately 97% (over 7 million) of the total of licensed land mobile transmitters. This is an area where competition, rather than regulation, has served the public interest well. Each individual user is a licensee who has control over his own system; each purchases or leases equipment from one of dozens of highly competitive suppliers; his assigned frequencies are shared by other similar licensed users. This situation pertains even when more than one licensee shares common equipment and facilities.

Thus, the FCC has imposed virtually none of the restrictions on private land mobile which have heretofore been required in the common carrier services such as closed entry or tariff regulations. One of Motorola's primary concerns with H.R. 13015 was its lack of distinction between private and common carrier land mobile, a

fear which has been substantially alleviated by the language of the Bill before us. There remain, however, a few areas in which this delineation must still be made or clarified.

1. Section 412(b)(1) requires a granted CRC license before an applicant to provide broadcast, land mobile or other radio services may construct his facility. This prohibition has been inapplicable to private land mobile users for many years. FCC clearance, if necessary, is the sole requirement before construction may commence. Imposing a "construction permit" rule would serve no discernible purpose.

2. Section 413 (a)(8), (10) and (11) are also inappropriate for private land mobile licensees. The user, generally with the assistance of a frequency coordinator, determines the frequency, location and area of operation to be served. We doubt that the public, the Commission, or the licensee would profit from increased Commission involvement in this area.

3. Sections 415(d) and 436(b) create an apparent discrepancy. The first is a general provision applicable to all services including private land mobile. It requires mutually exclusive applications for a single frequency to be disposed of on the basis of random selection. Section 436(b), on the other hand, only applies to mutually exclusive applications in the land mobile or other radio services (excluding

broadcast) and allows the Commission substantially greater leeway in selecting among competing applicants. We suggest, therefore, that Section 415(d) be specifically limited to applications in the broadcast service.

4. A final concern in this area is Section 422 which prohibits the Commission from regulating the content of any transmission. Congress is understandably sensitive when dealing with First Amendment rights, yet the block allocations on which the private land mobile service is premised necessitate limitations on transmission content. Without such requirements, the private land mobile radio services will inevitably lose their unique identities to the ultimate detriment of the radio user and the public.

ROLE OF DOMINANT CARRIERS

The primary thrust of H.R. 3333 is toward deregulation of the telecommunications industry whenever competition is sufficient to protect the public interest. Motorola agrees that this philosophy can and should be applicable to the common carrier land mobile service. When carriers are permitted to vie for a share of the market, the public reaps the benefit of the resulting lower costs and better quality of service. An entirely different situation pertains when one of the carriers is AT&T. An entity which for years has been insulated from competition because of virtual monopoly power granted by the Government must not be unleashed on

an unregulated market without stringent, enforceable safeguards. While we would have preferred a Bill prohibiting this communications giant from engaging in any unregulated, competitive segment of telecommunications, we believe that H.R. 3333 takes important steps toward ensuring viable competition in both common carrier and private land mobile services without denying AT&T opportunity for continued growth. For example, AT&T will still be a principal supplier to cellular systems even if it does not operate them.

Section 331(d) is the key section of this Bill for the land mobile industry. Absent this provision, AT&T would be free to penetrate and inevitably dominate this market because it would no longer be bound by the terms of the Consent Decree, (Section 331(b)).

It may be well to clarify further today's land mobile structure. We have already described the individually-licensed system that characterizes the private land mobile market. This situation, however, may undergo marked modification if trunked systems designed for private land mobile use became ascendent. Certainly, this is the direction that the FCC is endeavoring to force on the private land mobile community in the 800 MHz band. According to the Commission's decision in Docket No. 18262, these trunked systems, when utilized to serve a multiplicity of eligibles, will be operated by a third-party licensee (these systems are titled "Special Mobile Radio Systems" or SMRS). This third party, the SMRS operator, is permitted to charge for rendering service, but under FCC regulations, affirmed by the Circuit Court of Appeals, is not subject

to common carrier regulation.

Today, AT&T is not permitted to enter non-tariffed markets, and is effectively precluded from operating SMRS. We should point out that manufacturers such as Motorola are also effectively foreclosed, under FCC rules, from entering this market as SMRS licensees.

While trunked systems are in the embryonic stage, hundreds of applications for SMRS authorizations have been filed by entrepreneurs, mostly from individual businessmen and small companies. If H.R. 3333 were to be enacted without Section 331 (d), AT&T would be free to dominate this potentially large private land mobile market. Ironically, AT&T would then have more freedom than the competitive equipment suppliers, yet its assets exceed by a wide margin their combined total.

The result would be that private land mobile manufacturers will find themselves with drastically fewer potential customers. The monopoly power of AT&T will inexorably wither away competition. The small manufacutrers will be the first to fail; diminution of competition will, of course, adversely affect all suppliers.

The consequences of such an incursion will also fall heavily on the small entrepreneur licensee of an SMRS system. He is investing high-risk capital on the hope that not only will private dispatch trunked systems prove to be technically feasible but that they will attract sufficient customers at affordable rates to be economically viable. It is difficult to be salutary about the prospects for survival of most of them if in addition to the present substantial risks, they must also combat the might of AT&T.

Another group that would suffer greatly because of AT&T's presence would be those small radio dealers who service and maintain private land mobile equipment. The individual SMRS entrepreneur will lack the wherewithal to have his own service facility and will turn to the small independent to keep his system and the equipment of his customers properly functioning. AT&T, on the other hand, will undoubtedly have its own service and maintenance capability. If it dominates this market as it surely could do absent Section 331(d) these service shops cannot survive.

The current situation in the common carrier land mobile radio market is somewhat different although it demonstrates equally the need for Section 331(d). First, today's market is quite small - serving only about 250,000 mobile telephone subscribers. Secondly, the radio common carriers and the wireline carriers compete for this business in most areas but on a regulated, certificated basis whereby only enough entrants sufficient to serve market demand are authorized. Thirdly, prior to Docket No. 18262 there was scant spectrum available for common carrier mobile radio service, an amount inadequate to warrant more than token attention from AT&T.

Docket No. 18262, however, has provided the spectrum and calls for the establishment of highly-sophisticated cellular systems to provide radio-telephone serivce to the public. Motorola is both a believer in and developer of cellular technology; however, we recognize that such systems will be expensive, and considerable time will be needed before a sufficient base of customers will become subscribers so that the systems will be economically sound.

Although the Commission's Rules allow any qualified common carrier to apply for a cellular system, it is plain that the typical radio common carrier is at such a marked disadvantage vis a vis AT&T that competition cannot be real. Lest one fear that AT&T's growth would be stunted in this area, Motorola's projections on the costs of operating a cellular system indicate that the largest expense will be to the telephone company to pay for the needed wireline interconnections and network switching. The telephone company will, of course, realize substantial revenues as well for toll calls emanating from or into the system.

It should be noted that prohibitions against cross-subsidization or other limitations proposed to be imposed on the dominate carrier will not make the land mobile markets described above competitive. Dominance by AT&T will occur, whether it be in providing equipment, gathering subscribers or servicing the equipment, the prospects for real competition are bleak. The only viable alternative is the enactment of Section 331(d).

CROSS-SUBSIDIZATION

Because we believe that markets other than land mobile will be similarly dominated by AT&T, we testified previously that the dominate carrier should be excluded from all "competitive", non-regulated areas. We questioned whether fair competition would be achieved if a monopoly-based enterprise were permitted to penetrate markets served by competition. Since the authors of H.R. 3333, apart from Section 331(d), opted otherwise, the prohibitions against cross-subsidization take on increased significance.

H.R. 3333 does not require divestiture of either Western Electric or the Bell operating companies. Other provisions of the Bill, however, give assurances that cross-subsidization will not be permitted and that, if discovered, will trigger severe penalties.

Under H.R. 3333, only dominant carriers are required to file tariffs for inter-exchange telecommunications services (Section 325). Section 326(b)(1) authorizes the Commission to require a dominant carrier to maintain separate accounts for amounts received under any rate filed. Thus, the Commission will be able to determine whether the funds received originated from appropriate sources. This section also impowers the CRC to determine whether the rate involved is just and reasonable. This determination will vary depending upon the degree of competition in the market involved. Obviously, cross-subsidization is a greater concern when a dominant carrier is operating in a competitive market and could utilize revenues accrued from monopoly activities to subsidize its rates and therefore under-price those without such a base. This possibility is substantially minimized by the stringent penalties of Section 326(e)(2) which allows for awards of treble damages to a complaining carrier if a rate is determined to be less than just and reasonable.

The CRC is required, under Section 326(b)(2) to conclude hearings on tariffs within one year. We would hope that the Commission views this deadline, not as the norm, but as a maximum period which should be shortened whenever possible. Suits by

competitors to enjoin these illegal cross-subsidizies and/or collect damages historically drag on for several years. Plaintiffs who ultimately are awarded compensatory judgments often find that it is too late to resume their attempts to be competitive. Such a result could obtain in spite of a one-year deadline since the administrative process is frequently followed by judicial review.

Sections 325 and 326 protect against cross-subsidization in inter-exchange telecommunications services. Protection against this same practice in other unregulated telecommunications activities must be established under Section 331(c). Here, H.R. 3333 mandates arms-lengths dealings between a dominant carrier and its affiliates, and among affiliates. It also requires products, services or facilities which are offered to other affiliated organizations, to be offered to all other persons on a non-discriminatory basis at comparable rates and on comparable terms. Motorola hopes that this provision, in conjunction with Sections 325 and 326, and the severe criminal sanctions set forth in Section 545 for violation of any of these provisions, will guard against the anti-competitive practice of cross-subsidization. We also anticipate that, should those restrictions prove ineffective, the Commission will take further appropriate actions such as requiring divestiture as authorized under Section 331(c)(3).

AGENCY INTERVENTION

As the Subcommittee is aware, the present Administration has espoused a policy of deregulation which it has urged Administrative Agencies to follow. In a positive sense, this would

seem to be a forerunner of H.R. 3333 as far as the FCC is concerned and would seem, thereby, to ease any transition for the FCC (or the CRC as the successor organization proposed in this legislation).

Recent actions by the FCC, however, under the guise of letting competition govern give rise to a concern that the agency will all too quickly conclude that marketplace forces are deficient unless the market conforms to the Commission's preconception. For example, in Docket No. 18262, a reserve of 300 channels was set aside to be authorized for either conventional or trunked operations to be ". . .drawn upon to meet demands as they arise." (Memorandum, Opinion, and Order, March 19, 1975). In fact, in Los Angeles, Chicago, and New York, the supply of conventional channels has proven to be inadequate to satisfy the demand. Yet, attempts to draw as few as 50 channels from this reserve to satisfy the market need for conventional systems were rebuffed because the current Commission (only three Commissioners remain who participated in the 1975 decision) concluded " . . . that it would be unwise to do so now because the frequencies in reserve could better be used for the more efficient trunked systems." (Docket No. 79-106, Notice of Proposed Rulemaking, May 3, 1979). Leaving aside serious questions as to the factual accuracy of the Commission's conclusion, it is plain that the Commission has substituted its own rationale for the demonstrated preference of the marketplace.