## THE WHITE HOUSE WASHINGTON

July 9, 1969

To:

Chairman Rosel Hyde General James O'Connell

Mr. Don Baker
Dr. Willis Shapley
Dr. Tom Moore
Mr. William Morrill
Mr. Richard Gabel
Mr. Walter Hinchman

From: Tom Whitehead

For the meeting at 2:30 p.m. on Thursday, July 10 -- which will be held in Room 106 EOB.

Tele communica THE WHITE HOUSE WASHINGTON July 8, 1969 DOMESTIC SATELLITE POLICY Working Paper The Federal Communications Commission has drafted a proposed Order outlining interim policies regarding the establishment and operation of communications satellite systems for domestic services. Briefly, this Order would: Authorize a single multi-purpose system to incorporate standard voice services, television distribution, and certain specialized data services. - Establish an Advisory Committee to the Commission, consisting of the major competitors for commoncarrier and specialized satellite systems, for the purpose of developing a plan for the technical and operational design of the pilot system. - Designate Comsat as Planning Coordinator for the development of this plan. Defer all decisions on potential ownership of pilot or operational systems, or segments thereof, until the technical design and operational plans are submitted to and approved by the Commission. The Administration feels a more constructive approach to this issue is possible and seeks an interim position on domestic satellites which is more definitive and which promotes greater innovation and flexibility on the part of the private sector. There are two basic reasons for doing so at this time. First, there are a number of basic objections to the Commission proposal when it is examined in the context of U. S. communications generally. Second, this is probably the only major decision for some time that provides the leverage necessary to promote an examination of

the need for extensive common-carrier regulation of all U. S. communications and to stimulate a more vigorous and innovative competition in the communications industry.

### Background

The United States presently enjoys the most sophisticated, effective network of communications facilities and services of any nation, both common carrier and private. Because of our highly developed terrestrial systems, the benefits of communication satellites (or any new technology) are both less striking and less easily discerned in U. S. domestic services than is the case in other countries where satellites offer clear economic benefits.

Nevertheless, there is ample evidence that satellite technology could find many economic applications in the U.S. Specific proposals and cost analyses suggest cost of service advantages for some specialized services such as distribution of TV programs to local broadcast stations, communication with and between ocean vessels and high-speed aircraft, and meteorological data collection and exchange. Satellites may also enjoy a slight cost advantage for long distance carriage of "bulk" message and data traffic, though this is less certain at this time. Due to these generally favorable prospects, several major corporations (AT&T Comsat, ABC, GE) as well as public-interest groups (Ford Foundation) have indicated a willingness to undertake the risk of establishing domestic satellite systems for various specialized or multi-purpose services.

Despite this interest and promise, incorporation of communication satellites into the highly developed U. S. communications industry faces two serious impediments. First, wherever satellites appear competitive with existing terrestrial technologies, they pose a major uncertainty for regulated common carriers and threaten to weaken future rates bases. Second, FCC and Congressional policies make artificial distinctions between satellite and terrestrial technologies with respect to both ownership rights and public-interest objectives, and this raises both administrative and economic barriers to potential investors and users.

### Evaluation of the FCC Approach

The FCC approach to this policy problem has the following problems:

- (1) It would effectively lock the U. S. for the foreseeable future into a multi-purpose operation
  typical of common-carrier systems and would
  therefore impede the development and application
  of satellite technology for the specialized services
  for which it appears most promising in domestic
  U. S. communications.
- (2) While the FCC cites the need to learn more about satellite technology and economics in dome stic communications applications, the proposed Order would foreclose significant learning about the very kind of systems we know least about but which appear to offer the most potential.
- (3) It hinders the interplay of economics, technology, and operations by the industry which would stimulate active development of the potential for new uses and new services, by insisting on finding a way to accommodate the new technology to existing uses and operations and by forcing design of the system before the industry knows how ownership rights are to be established.
- (4) It promises a "least common denominator" compromise solution by, in effect, requiring consensus among a consortium of mutually hostile interests, thereby extending to the domestic scene the demonstrated faults this approach has produced internationally.
- (5) Finally, it places the burden of risk almost completely on public users of rate-regulated common carriers rather than on the private sector where it is appropriate, by insulating existing common carriers from "unfair competition" and by assuring adequate rate of return for the satellite system.

### Action

The Administration considers this an important policy issue and expects to have something to say on the matter in a short period of time. We will immediately establish a working group with representation from DTM, CEA, NASA, Justice, and Commerce (with the FCC as an observer or member at their option) to attempt to work out an alternative approach. Our objectives would be to:

- forestall (at least temporarily) the need for automatic extension of common-carrier regulatory policies to satellite communications until more experience is gained in domestic applications.
- minimize the regulatory impediments to technological and market innovation.
- use this approach as a wedge to encourage more vigorous innovative competition among communications organizations.

A number of alternative policy approaches, including those of the draft FCC Order and the Rostow Report, have been compared as ways of achieving these objectives. The attached draft outlines a provisional policy that appears to offer the most promise in terms of both objectives and feasibility.

Attachment

### Provisional Domestic Communications Satellite Program

### Draft

There is general agreement that the first phase in implementing satellite systems for U. S. domestic communication services should be a provisional program, in order to resolve various technical, operational, and economic issues. This paper sets forth interim policies for ownership and operational arrangements that might guide such a program. These are proposed as an alternative to those set forth by the Commission staff, though the objectives are the same -- i.e., to hold open final ownership and other policy options pending resolution of the issues noted, while encouraging development of satellite services to begin.

The present situation with respect to domestic satellite services is quite analogous to that which existed for international services in the early 1960's. There is widespread feeling that such services may prove economically attractive, but there are major differences as to what may be the best operating mode or modes. Some favor multi-purpose, others specialized operation; some favor pre-assigned bulk transmission, others demand-assigned message service; some favor multi-beam antennas, others single-beam; and so on.

To help resolve the earlier differences about satellite operations for international service, NASA carried out a series of experiments, partly on its own and partly in support of private interests. These included the Telstar, Relay, and Syncom projects, each of which was strongly supported by its proponents as the optimum system. This led to the adoption of one basic operating mode -- i.e., the geostationary configuration represented by Syncom -- as clearly preferable for most communication satellites.

An interim domestic satellite communications program should be structured along lines similar to those which worked in this previous instance, with some modification to reflect both greater technological confidence and increased commercial interest. Specifically, NASA would serve as technical coordinator of the space segment and provider of launch services. Qualified private and public entities would be authorized to implement their individual projects on a competitive or complementary basis as they choose, including individual or shared ownership of both space and earth station facilities.

NASA's function would be (1) to provide launch services; (2) to determine (in conjunction with the FCC) compatibility of the proposed satellites with respect to orbital location and other technical parameters; and (3) to assist, as requested, with the combination of individual projects on a single satellite. Assignment of these functions to NASA would be of particular benefit to those desiring to test relatively new uses and operational techniques (e.g., demand-assigned data networks, regional and/or nationwide video networks, special-purpose or temporary-use networks), while posing no burden to those contemplating more conventional operations. Parties desiring to construct and operate an entire satellite for their exclusive use would be free to do so, as would those who wished to launch a multi-purpose satellite for shared use or to combine individual systems on a single shared satellite for economy in launch and station-keeping.

The only criterion for authorization of proposed systems would be a determination by FCC and NASA of technical compatibility with respect to orbital location, noninterference with other communications services, and availability of spectrum. Ownership of all space segment and ground station facilities would be retained by the private sector. There would be no restrictions on types of organizations free to enter the field, except that existing common carriers would be required to do so through a separate affiliate. (This will require a consent decree waiver by the Department of Justice.) There would be no FCC regulation of services or rates except as parts of the terrestrial common-carrier system is involved. Similarly, there would be no Federal assurance of economic viability and no limitation on rate of return; all risk would be placed on the private terrestrial common carriers to engage in nonpredatory price competition with satellite systems.

To provide appropriate opportunity for venture capital in this area, each owner of a space segment would be assured use of his segment through 1979. The free entry aspects of this policy would remain in effect through 1974, at which time the entire provisional policy would be reviewed.

This provisional policy provides substantial encouragement for research by firms entering the satellite communications field. This can be expected to include research on new services, new markets.

and new technology, including far more exploration than at present in tradeoffs between ground and space segments. The NASA ATS experiment opportunity can be expected to be seized upon by potential entrants immediately. The FCC and NASA should evaluate the experimentation of the private sector and NASA should undertake a limited experimental program to augment private efforts if necessary.

Information is especially needed on interference between satellite systems and terrestrial facilities. Every effort should be made to avoid such interference. Because of the lack of experience with potential satellite-terrestrial interference situations, however, it is to be expected that some interference will occur in spite of best efforts by all parties. Potential but uncertain interference situations should not be grounds for refusing to authorize new satellite systems, but the new service should be held financially responsible for compensation of the pre-existing service for harmful interference.

The major arguments in favor of and in opposition to this approach are summarized below:

### Pro:

- (1) Provides maximum learning about technical, operating, and economic aspects of satellite communications.
- (2) Encourages innovation and full realization of satellite potential through the benefits of competition.
- (3) Least delay in implementation (by avoidance of committee or consortium approach).
- (4) Avoids the type of problems which have arisen in INTELSAT consortium where full exploitation of new technology for a variety of public and private benefits has often been subjugated to limited commercial interests.
- (5) No single entity obtains any advantage in space or earth segment ownership nor in prestige, public awareness, or other intangible benefits.
- (6) All ownership options -- including possible public ownership of some domestic satellite systems -- remain open.

- (7) Provides time for subsequent assessment of domestic satellite and other communications prospects, without delaying experimentation and further technological development.
- (8) Most advanced technology (through use of NASA competence and objectivity).
- (9) Ease of including experimental studies (at government expense where appropriate) and greater opportunity for small-scale experiments such as data network, regional TV networks, educational/information networks, etc.
- (10) All risk is placed on the private sector, rather than on the public users of rate-regulated common carriers.
- (11) Provides valuable information on benefits and disadvantages of relatively free competition in bulk transmission in an area of rapid technological change that will provide needed perspective on FCC regulatory precedents that cannot otherwise be obtained.
- (12) Provides an opportunity for private enterprise to make a contribution in the area of various social and economic development problems that might be precluded under a tightly regulated single satellite system.

### Con:

- (1) Spectre of government participation in private communication ventures.
- (2) Potential legal objections by Comsat?
- (3) Potential Congressional objections to NASA role?

JOE L. EVINS, TENN.

WRIGHT PATMAN, TEX.
TOM STEED, OKLA.
JOHN C. KLUCZYNSKI, ILL.
JOHN D. DINGELL, MICH.
NEAL SMITH, IOWA
JAMES C. CORMAN, CALIF.
JOSEPH P. ADDABBO, N.Y.
WILLIAM L. HUNGATE, MO.

SILVIO O. CONTE, MASS.
JAMES T. BROYHILL, N.C.
FRANK HORTON, N.Y.
LAURENCE J. BURTON, UTAH
J. WILLIAM STANTON, OHIO
DANIEL E. BUTTON, N.Y.

## Select Committee on Small Pusiness House of Representatives of the United States

Ninety-first Congress Mashington, D.C. 20515 July 11, 1969 Tele commence To.

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BRYAN H. JACQUES STAFF DIRECTOR AND GENERAL COUNCEL

Mr. James D. O'Connell
Director of Telecommunications
Management
Office of Emergency Preparedness
Executive Office Building Annex
Washington, D. C. 20504

Dear Mr. O'Connell:

An additional day of hearings has been scheduled for Tuesday, July 29, 1969, by the Subcommittee on Activities of Regulatory Agencies Relating to Small Business on the reallocation of radio frequencies.

We will appreciate your appearing before that subcommittee at 11:30 a.m. on that day to give your testimony. Kindly advise whether this date and time is convenient, and whether you yourself will appear or whether you will designate someone else to appear in your stead.

We would appreciate having your statement on file 48 hours in advance of the hearing. Your cooperation will be greatly appreciated.

Sincerely yours

John D. Dingell, Chairman Subcommittee on Activities of Regulatory Agencies Relating to Small Business

# OFFICE OF TELECOMMUNICATIONS MANAGEMENT WASHINGTON, D.C. 20504

OFFICE OF THE DIRECTOR

June 16, 1969

MEMORANDUM FOR THE DIRECTOR, OEP

SUBJECT: Recap of Hearings Before the House Subcommittee on Small Business on "Allocation of Radio Frequency Spectrum and Its Impact on Small Business", 9-10-11 June 1969

- 1. Congressman Dingell is Chairman of the Subcommittee on Small Business which has been conducting a series of hearings on the above subject for the past year or more. This week's hearing was another in the series.
- 2. Small business is a heavy user of "land mobile" radio for such communications as for taxicabs, ready-mix cement trucks, florists trucks, plumbers repair trucks, ambulances, and smaller operations. Small business interests (and the manufacturers of land mobile radio equipment) maintain that their frequency bands are saturated to the point that (a) current services are unsatisfactory, (b) services cannot be expanded, (c) new requirements cannot be introduced, and (d) as a consequence, small business is suffering because more frequencies have not been allocated. Frequencies currently allocated for UHF-television would be ideal for land mobile use and heavy pressure is being brought by the land mobile interests to reallocate unused TV frequencies. TV broadcasters object arguing that the unused channels are needed for expansion.
- 3. The witnesses listed in the attached sheets testified during the 9-10-11 June hearings. Except for the All-Channel Television Society witness, FCC Commissioners, Mr. Novak and Mr. Gifford, the testimony, in one way or another, supported the land mobile interests. The one witness for the TV interests had a very rough time of it. Mr. Dingell as Chairman and the two Committee Counsellors worked him over with the thrust of their questions and comments being along

the line of what has the TV industry done to take advantage of modern technology to make more effective use of the spectrum. The fact that the TV witness presented a statement that was less than good didn't help him.

- 4. Mr. Novak's testimony consisted of a review and reiteration of that part of the Report of the President's Task Force on Communication Policy pertaining to frequency spectrum management. Mr. Gifford outlined the need to embark on a program to improve substantially the tools of radio frequency management to cope with demands on the spectrum that he estimates will increase ten-fold over the next 20 years. Chairman Hyde presented a statement on frequency management by the FCC and deplored that lack of funds and personnel prevented a better job from being done.
- 5. In the past, the Subcommittee, and its Chairman particularly, persisted in criticizing the FCC for failing to do its job. At the 9-10-11 June hearings, Mr. Dingell went out of his way to praise the FCC. He included Chairman Hyde with him in a televised news conference that was held on the third day. At one point Mr. Dingell blamed a "stingy BOB" for the FCC's problems. The six Commissioners present were invited to share the raised dias of the hearing room with the Congressmen.
- 6. The Subcommittee counsel informed the OTM observor (who was present throughout the hearings) that it was the Chairman's intention to resume the hearings in about a month. He expected that witnesses from the Transportation, Commerce, FCC, and OTM would be called to testify on the subject of frequency spectrum management.
- 7. With regard to paragraph 6, the manner and extent to which the Office should participate in the forthcoming hearing will be the subject of coordination with the White House staff.

J. D. O'Connell

Raish cc: Mr. Kendall HOUSE SELECT COMMITTEE ON SMALL BUSINESS
ROOM 2361, RAYBURN HOUSE OFFICE BUILDING
TELEPHONE: 225-4351 or 225-5821

#### SCHEDULE OF WITNESSES

#### HEARINGS ON

ALLOCATION OF RADIO FREQUENCY SPECTRUM
AND ITS IMPACT ON SMALL BUSINESS

SUBCOMMITTEE ON REGULATORY AGENCIES

June 9, 1969

10:00 A. M.

- 1. Mr. Max Guiberson
  President of the Land Mobile Communications Council
- 2. Mr. Martin Firestone
  General Counsel of the All-Channel Television Society
- 3. Mr. Jules S. Tewlow
  Director of Special Projects
  American Newspaper Publishers Association Research
  Institute

### HEARINGS ON

ALLOCATION OF RADIO FREQUENCY SPECTRUM AND ITS IMPACT ON SMALL BUSINESS

SUBCOMMITTEE ON REGULATORY AGENCIES

JUNE 9, 1969 10:00 a.m.

Mr. Richard P. Gifford Chairman Joint Technical Advisory Committee

Mr. Alan Novak
Former Director of the President's
Task Force on Communications Policy

Mr. Charles W. Hubley Chief Electronics Engineer Associated Press

Mr. Walter R. Key
Law Enforcement Assistance Administration
Department of Justice

Mr. Thomas M. Allebrandi Chairman, Information and Education Subcommittee National Committee for Utilities Radio

Mr. Roger Reinke International Association of Police Chiefs

Mr. William C. Hanna Chief Engineer Public Safety Systems Division General Research Corporation

Mr. J. S. Anderson Chairman of the Board Aeronautical Radio, Inc.

Mr. John C. Welch Maloney Concrete Company

### HEARINGS ON

## ALLOCATION OF RADIO FREQUENCY SPECTRUM AND ITS IMPACT ON SMALL BUSINESS

## SUBCOMMITTEE ON REGULATORY AGENCIES

JUNE 11, 1969 10:00 a.m.

- 1. Mr. James Evans
  .. Michigan State Police
- Mr. George DeMent Chairman of the Board Chicago Transit Authority
- 3. Chief Walter Krasny Ann Arbor Police Department
- 4. Eugene L. Nagel, M. D. School of Medicine University of Miami
- 5. Mr. Ben Demby
  Director
  Communications Department
  City of Miami
- 6. Federal Communications Commission Honorable Rosel H. Hyde Chairman

Honorable Robert T. Bartley Commissioner

Honorable Robert E. Lee Commissioner

Honorable Kenneth A. Cox Commissioner

Honorable James J. Wadsworth. Commissioner

Honorable Nicholas Johnson Commissioner

Honorable R. Rex Lee Commissioner CONGRESSIONAL HEARINGS ON SPECTRUM ALLOCATIONS REFLECT 'SIGNIFICANT PROGRESS' BY FCC, DINGELL SAYS IN COMMENDING HYDE; TRANSPORTATION, COMMERCE DEPARTMENTS TO APPEAR IN ABOUT MONTH; CONGRESSMAN SAYS BUDGET BUREAU IS 'STINGY' WITH FCC

The House Small Business Subcommittee on Regulatory Agencies continued its vigorous exploration of the "allocation of radio frequency spectrum and its impact on small business" and other areas of the country's social and economic life in three intensive days of hearings this week which clearly indicated that the work of the subcommittee during the past couple of years has, in fact, moved the land mobile radio frequency congestion crisis closer to resolution.

Subcommittee Chairman John D. Dingell (D., Mich.), one of the most outspoken Congressional critics of the Federal Communications Commission since his panel began looking into the spectrum allocation situation, prompted a noticeable sigh of relief from a Rayburn Building hearing room packed with FCC Commissioners and staff members, as well as other participants and observers at the hearing sessions, as, at the conclusion of the Commission's presentation, he noted that the "significant progress" which has been made "of late" by the agency is a source of "comfort" to the subcommittee.

Representative Dingell particularly commended and complimented FCC Chairman Rosel H. Hyde for his strong efforts over the past couple of years in concentrating much of the Commission's efforts on the land mobile frequency problem, though he continued his condemnation of the budgeting procedures within the federal government which have resulted in denying the Commission sufficient money and manpower to do its work.

While Mr. Dingell personally directed much of the questioning of a variety of witnesses during the hearing sessions this week, other members of both the Subcommittee on Regulatory Agencies and the parent House Small Business Committee took active roles in the sessions, including the committee's ranking minority member, Representative Silvio O. Conte (R., Mass.); Representative William L. Hungate (D., Mo.), who chaired a portion of the hearings; and Representatives James T. Broyhill (R., N.C.), Joseph P. Addabbo (D., N.Y.), and John C. Kluczynski (D., Ill.). Parent committee Chairman Joe L. Evins (D., Tenn.) also made an appearance at the hearings.

- In addition, Committee General Counsel Gregg R. Potvin, and Minority Counsel Fred M. Wertheimer played substantial roles in their interrogation of the witnesses.

Witnesses and/or participants during the three days of hearings, paragraphed by days, and in the order of their appearances, were:

Max Guiberson, President of the Land Mobile Communications Council, and C. Michael Meehan, Mr. Guiberson's counsel; Martin Firestone, General Counsel for the All Channel Television Society, assisted by Association of Maximum Service Telecasters Assistant Executive Director Roy Easley, engineering consultant Howard Head, and AMST counsel Henry Goldberg; Jules S. Tewlow, of the American Newspaper Publishers Association; Charles W. Hubley, of the Associated Press;

Richard P. Gifford, Chairman of the Joint Technical Advisory Committee; Alan Novak, former Director of President Johnson's Task Force on Communications Policy; Walter R. Key, of the law Enforcement Assistance Administration; Thomas M. Allebrandi, of the National Committee for Utilities Radio; Roger Reinke, of the International Association of Chiefs of Police; Harvey G. Ryland, of General Research Corp.; J.S. Anderson, Chairman of Aeronautical Radio, Inc.; John C. Welch, of Maloney Concrete Co.;

Captain Robert Buchanan and R.J. Evans, of the Michigan State Police; George DeMent, Chairman of the Chicago Transit Authority; the FCC Commissioners, with the exception of Commissioner James J. Wadsworth; Chief Walter Krasny, of the Ann Arbor, Mich., Police Department; Dr. Eugene L. Nagel, of the University of Miami School of Medicine; and Ben Demby, Director of the City of Miami Communications Department.

The list of witnesses which had been released by the committee had included Hugh J. Gownley, Deputy Assistant Secretary of the Department of Transportation for Policy & International Affairs, and Robert S. Kirby, of the Department of Commerce. It is understood, however, that the White House asked the committee to excuse these officials from the hearings this week.

When the committee said this week that spokesmen from the Commerce and Transportation Departments would appear before the group in about another month, to discuss their capabilities for managing the frequency spectrum, it led at least one observer to speculate that the wheels in government which are turning on possible government reorganization might be productive of a publicly released proposal by that time. It is understood that the Director of Telecommunications. Management will also be given an opportunity to testify at the hearings in another month.

An unusual note was injected into the subcommittee's hearings on Wednesday, June 11, as a number of equipment manufacturers laid out some of the most recent mobile communications equipment developments, and witnesses gave actual operating demonstrations or descriptions of how the equipment operates and the additional frequency demands which the developments will place on the spectrum available to the land mobile radio services, and a televised press conference was held in the hearing room, featuring Mr. Dingell, Chairman Hyde and several of the witnesses.

(The prepared testimony of the witnesses is covered in other articles in this issue of Industrial Communications. The balance of this story will cover the interrogation and comments of the witnesses, and statements by the members of the committee and committee counsel.)

The FCC's appearance before the group on Wednesday, June 11, the Commission's regular meeting day, moved right along without much questioning, following the submission of the agency's statements (see separate story), formal presentation of the "main" statement of the Commission, and oral summaries of the differing views of Commissioners Robert E. Lee and Nicholas Johnson.

When Mr. Lee brought up the subject of the Joint Technical Advisory Committee's recommendation for a pilot regional frequency management program, with the comment that "we tried to get funds this year, and will try again next year," Representative Dingell commented that he has "been trying to find ways of getting your true thoughts" on appropriations, without having to go through "the unresponsive Bureau of the Budget."

A discussion between Representative Dingell and Mr. Potvin noted that the Federal Aviation Administration spends more on communications research in a year than the "entire FCC budget," and the Navy spends "five times the entire FCC budget in just thinking about communications for Polaris Submarines."

Representative Addabbo agreed with Commissioner Lee's observations about a rigid block allocation system being bad, with the comment that a police department, particularly, if there are no remaining available frequencies, should be able to

find an unused frequency in some other service, and upon proving that it is not used, get it.

When Mr. Dingell asked Mr. Hyde at one point whether there is "any way the FCC could more efficiently coordinate" communications problems, such as in the handling of state police problems, The FCC Chairman agreed "we must find a way to deal with these problems." In the police service, Chairman Hyde said, "we must find a way to consolidate systems" in a metropolitan area.

Representative Dingell asked at one point whether an overall spectrum allocations study to "provide basic tools" would be worthwhile, and Mr. Hyde said "there is no question" that the Commission needs more information than it currently has, but that the lack of resources at the agency has been a problem. Mr. Dingell commented that "I think you're afflicated with a stingy Bureau of Budget and a stingy Congress."

When the subcommittee chairman inquired as to the cost of a "well-done," comprehensive spectrum allocation study, Mr. Hyde pointed to the "Silent Crisis" report from the Commerce Department which had suggested a budget of \$9,000,000 for the first year, and up to \$50,000,000 a year after that.

"We need some applied research," Chairman Hyde said, adding again that he strongly supports JTAC's recommendation for a pilot project to "tailor services to a particular area." He told Congressman Dingell that the FCC had estimated that it would cost \$1,250,000 for the first year for the JTAC-recommended project.

When Mr. Dingell said he feels that the FCC "should make its own long-range plan," Mr. Hyde said he agrees, but "We haven't been able to get funds for what we know is urgently needed."

Carrying the funds discussion over to Commissioner Johnson's appearance before the subcommittee, Mr. Dingell said he feels that a \$20,000,000 to \$50,000,000 annual budget for a good spectrum management program in the federal government would be a "good investment."

Commissioner Johnson had related a comment from a Department of Defence spokesman who had once told the Commission that while DoD had significant information in the spectrum management area which would be of help to the Commission, "you don't even have enough money to talk to us." The lack referred to, he said, was in personnel to meet with DoD representatives to learn what the information is and how to use it.

Representative Dingell had opened the hearings on Monday morning, June 9, with the comment that the sessions are "the culmination" of similar hearings held by the subcommittee during the last session of Congress. The "focus" of the hearings, he said, "will be on the additional need for spectrum space created by new technology." As an "historic first," Mr. Dingell said, the subcommittee had been licensed by the FCC as "an explorational and developmental broadcaster," to permit it to be "on the air" during the equipment demonstrations which were to follow.

"An additional task for the hearings," he said, "will be to throw such light as we are able on the issues surrounding dockets 18261 and 18262. It does not appear that this is necessarily a simple task in that I note that both sides to the controversy feel there has been a 'gap' of one sort or another. The Association of Maximum Service Telecasters talks of the 'exploding' of land mobile credibility. The land mobile forces, on the other hand, refer to a 'lack of

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accuracy'. "Hopefully," he said, "a by-product of these hearings will be to defuse any explosive material and to infuse a higher degree of accuracy."

Representative Conte, for the minority, opened his participation in the hearings with expression of "concern with the serious problem of congestion in the radio frequency spectrum presently allocated for land mobile use. We are concerned with why this congestion exists and with how we can best deal with the problem of correcting this situation. We are also concerned with what the future holds in store in this entire area and how we can best meet the challenges which lie ahead," he said.

Land Mobile Communications Council President Guiberson, as opening witness in. the hearings, was questioned by Mr. Conte as to his feelings about the argument that more efficient use of present land mobile frequencies would solve the problem; about findings of the Stanford Research Institute "interim" report; and about changes needed in the spectrum management processes.

The IMCC President suggested that the "final report" of SRI, he feels, will "bear out" the fact that "adequate use is being made of the present land mobile frequencies," and that in the spectrum management area, the land mobile field has recognized the need for improvement and "has gone a long way" in that direction.

When Mr. Conte asked whether the UHF TV stations on channels 14 through 20 should "bear the expense" of moving out of those channels, Mr. Guiberson alluded to several methods of helping to meet the expense. He suggested that the application filing fees which land mobile applicants pay to the FCC could be devoted to the project; or that a federal grant system could be established; or that land mobile licensees needing the particular frequencies involved in the move could pay the cost.

Discussing with Mr. Conte the land mobile position that the FCC proposals in docket 18261 must be relaxed if mobile users are to "set some good out of the frequencies" in the lower seven UHF TV channels, Mr. Guiberson said he feels that the proposals, as issued by the Commission, would result in "very little" interference to television operations, but at the same time, they would result in "very little relief" for land mobile radio.

When Mr. Potvin asked Mr. Meehan about the boundaries of the urbanized areas used to define the 25 centers for which the FCC proposals intend to provide frequency relief, Representative Dingell commented that the lines were "frozen" in 1960, under the rule proposals, and the "1960 census is as out of date as the 1940 census."

Mr. Potvin, turning to the "battle" between AMST and land mobile, referred to the AMST statement that the SRI report "proves" the AMST case, and said he doesn't get that reading from the SRI report, a position with which Mr. Meehan agreed. On the SRI monitoring effort, Mr. Guiberson agreed with Mr. Potvin that "a mere recording by a machine is not sufficient"---that "value judgments should be made" in such a study.

When the Mr. Firestone appeared on behalf of the All Channel Television Society flanked by the three representatives of the Association of Maximum Service Telecasters, Chairman Dingell pointed out that the subcommittee had heard from Mr. Goldberg and Mr. Head, and feels that "their appearance last year was quite complete." It is "not my purpose," Mr. Dingell said, to "bog these proceedings

down like the FCC does, with repetitious" statements.

Prepared statements offered by the AMST representatives were submitted to the committee's counsel for a determination as to whether they should be allowed in the record of this week's hearings, while Mr. Firestone went on to read his statement on behalf of ACT.

Going through with Mr. Firestone some of the arithmetic in AMST's filings with the FCC on the spectrum dockets, Mr. Potvin clarified several points by coming up with different results than had been offered by AMST. On one point—the economic study submitted by Robert R. Nathan Associates offering a "shadow pricing" philosophy, Mr. Potvin noted that the Nathan study had said a portion of prime time viewing was worth 50 cents to the home viewer, at one spot in the report, and that a \$1 figure was used for the same time at another spot. This difference of 100%, the committee counsel said, "does seem to raise a question as to validity of conclusions" drawn in the report as to the value of the television service.

When Mr. Goldberg suggested that the Nathan firm should furnish the subcommittee an explanation of why the different figures were used, Mr. Potvin suggested that the explanation also be furnished to the FCC staff assigned to analyze the particular study.

Discussing Chairman Dingell's suggestion that ACTS should be "rather hardput to make a categorical statement that the public is better served by the fifth
re-run of 'I Love Lucy' than by having adequate police or fire communications for
a major city," Mr. Firestone said he is "convinced there are frequencies available"
if the frequencies that are available are used more efficiently by land mobile
radio.

Mr. Dingell further suggested that "it's pretty hard to say" UHF channels which are not being used or are tied up in "dead CP's" are "sancrosanct" when there is a shortage of police and fire frequencies, and that ACTS would be "hard put to say there is not heavy use of the land mobile channels."

The subcommittee chairman asked whether ACTS is saying that the FCC's allocation for television "is the best possible plan of allocation which should be engraved in stone for years to come," and getting no answer from Mr. Firestone, offered his own view that "I'm certain the channels could be much better allocated."

"I like the serene way in which broadcasters pick out the channels most suitable to them," Mr. Dingell went on, and then say "land mobile should use the rest." He also hit the fact that "in one breath," the broadcasters "say the FCC has no knowledge in the area of land mobile—I agree with you; they don't have the staff; they've never requested the funds—and on the other hand, you feel that the FCC allocations are right in the TV area."

The subcommitte's position, Mr. Dingell said, "is that something has to be done to allocate spectrum" for land mobile radio, and "I find in your industry a very stiff-necked attitude. . .I admire your dedication that they (land mobile) should use their spectrum effectively, but don't see why broadcast should not also."

Mr. Potvin, receiving Mr. Head's view that television receivers should be improved and that the TV assignment "taboos" could be reduced if they were, went on to the

observation, agreed to by Mr. Head, that "then allocations should be changed." Mr. Potvin said "In this case, then, ACTS is saying that reallocations should be made."

Mr. Head told the subcommittee that the "people who make television receivers also make land mobile equipment," and that the problem is thus in their hands.

Representative Dingell, noting that "We have wasteful use by broadcasters," and "we've got land mobile needs," asked "Can't we get together on this problem." Maybe "you can say" there is "bad handling" of their frequencies by the land mobile people, Mr. Dingell said to the ACTS contingent, but "don't you feel you have some burden, too?" He added that "We are going to ask about the government share of the spectrum, too."

The subcommittee chairman said he feels Mr. Firestone has "come a long way" from the stiff broadcast position of a year ago," but is still "not concerned with the whole problem." This "is the point you're very clearly missing," he said. If the spectrum had been properly allocated in the first place, he said, "we wouldn't be in such a mess." Mr. Dingell said he hasn't heard "any of you (broadcasters) say anything other than 'status quo' should be preserved for TV while we squeeze others."

We have a "major crisis" on our hands, the Congressman said, and "I think you should want to" do something about it now. "You're not going to be able to stave off the impossible much longer," he said.

Mr. Firestone said he does "not disagree" that there is a crisis, but he is "not ready to agree as to how much we should give up."

When Mr. Potvin asked how many of the AMST members also belong to the National Association of Broadcasters, Mr. Goldberg said "a bare majority, if that." Mr. Easley fielded the next question——as to whether the proposed NAB-National Cable Television Association agreement poses a "drastic change" for the entertainment industry—with the observation that "NAB has not yet approved the staff agreement." If the agreement is adopted, he told the subcommittee, it would "have a beneficial effect on CATV's in the top 25 markets," and a "deleterious effect for everybody else."

Mr. Potvin's discussion with the ACTS witnesses of the AMST inference that the land mobile people had "kept hidden" the fact that land mobile "authorized stations" were different from the number of "stations on the air," whereas the fact is that the FCC advises people to apply for more units than they plan to use immediately, drew another comment from Mr. Dingell. "You operate with only one eye open, or with your head in the sand," he said. "If I were in your business," he said, "I'd be embarrassed."

Mr. Head said he "agrees with" Mr. Dingell's "thinking" and "feel you're on the right track, but please bear in mind that it is the receiver manufacturers you have to get after--Motorola, GE and RCA, who not only dominate the land mobile field, but they dominate the TV receiver market." When Mr. Potvin observed that "there is an RCA and an NBC," the line of discussion ended.

Congressman Dingell noted that "You're going to be in big trouble" if "you don't try to help us get the problem straightened out," and Mr. Firestone said "we want to talk about 900 megacycles," but nobody else does."

When Mr. Wertheimer asked whether he was aware of studies that show that the long-range needs of land mobile are going to require additional spectrum, Mr. Firestone said he "hasn't heard what they will do with 900 megacycles," If the "government decided" that additional frequencies "must be made available," the minority counsel asked, "What then will be your position?" Mr. Firestone said he feels that "that decision has to be a couple of years away."

Mr. Goldberg, injecting the thought that the Kelly Scientific Corp., and others have pointed to "known techniques" that would improve land mobile spectrum unilization, drew a question from Mr. Potvin about the "diametrically opposed" views of the Kelly firm in studies it made before and after it had been retained by the AMST, but Mr. Goldberg said "we think he was consistent."

When Mr. Wertheimer asked Mr. Firestone to "look at the chart showing UHF TV having 50% of the spectrum," and asked "Can't you feel we have to make changes," the ACT counsel said "yes," but not now, while land mobile is "focusing on channels 14-20."

Turning again to the point that Dr. Peter Kelly, before being retained by AMST, had recommended that UHF television spectrum be reallocated to the land mobile field, Mr. Potvin was advised by Mr. Goldberg that "AMST was aware of this." Mr. Easley said that the Kelly firm's "common recommendation" in all the studies it has made is "for a smaller number of larger land mobile systems."

A "simple truth" about Dr. Kelly's studies, Chairman Dingell concluded, "is that if one makes certain assumptions at the beginning of a study, he can usually prove what he wants to prove."

The witnesses from the newspaper field, Mr. Tewlow and Mr. Hubley, drew relatively little questioning from the subcommittee. Mr. Tewlow answered Chairman Dingell at one point that the newspaper industry is "indeed" running in spectrum problems, and Mr. Hubley advised Mr. Potvin that he does not see how use of "common dispatch systems" would help the Associated Press people "at all." Mr. Potvin observed that the fact that broadcasters have adequate remote pickup frequencies, while the press people do not have adequate frequencies "almost smacks of antitrust considerations," and Mr. Dingell noted that "It is the purpose of the committee to try to get you the spectrum you need."

The subcommittee members were obviously impressed with Mr. Gifford's presentation about JTAC's work in the spectrum management area, and Congressman Huntgate questioned him extensively as to the type of pilot project JTAC has recommended.

Responding to Mr. Potvin's questions about "upcoming advances" in the television industry, Mr. Gifford said there have been "dreams" of three-dimensional TV, and wall-size pictures. He agreed with Mr. Potvin that in the television field, the advances will be more "refinement" than "innovation," and that "innovations" in the electronics field as a whole are coming faster than they are in television.

Asked about "funding" for spectrum management by Mr. Wertheimer, Mr. Gifford said we need "a new level of funding," not "fantastic" in relation to the contribution which the spectrum is making to the gross national product, but "much higher" than at present. Asked about possible government reorganization, the JTAC Chairman said he has found it "no problem" to work with the FCC and the Director of Telecommunications Management on technical questions, and perhaps there could

June 13, 1969

be one common technical body to serve both operations.

He agreed emphatically with Mr. Wertheimer that "we must start now," Particularly, he said, "when I look at what's happened in the past 20 years."

Mr. Novak, having concluded his summary of what President Johnson's Task Force on Communications Policy had recommended, told Mr. Potvin that the "logical contenders" to house the single spectrum management role which the Task Force has recommended, are the Transportation or Commerce Departments, since both have the capability and background. It was at this point that Mr. Potvin noted that both Departments will appear before the subcommittee in about a month, and that "both will have a lot to say."

When Representative Hungate asked about the Defense Department, Mr. Novak it would "certainly" have the capability, but that he would "personally favor a consolidation" in the executive department. He added that "I don't think we can continue to jerry-rig between DTM and FCC."

The former Director of the Task Force said he feels that the FCC should be funded "much better," but that a regulatory agency has both "friends and enemies" and regulatory problems, such as those involved in the FCC's administration of the broadcast service, tend to keep funding down for the Commission and spectrum management should not be caught in this box.

Asked as to whether the government's Electromagnetic Compatibility Analysis Center (ECAC) at Annapolis, Md., could be used as the consolidated technical respository in an overall spectrum management effect, Mr. Novak said the concept is there, but it would have to be a much different ECAC "than what we have now."

When Representative Hungate referred to the Task Force recommendation that land mobile services should be able to use spectrum in the UHF television bands subject to no interference to TV, Mr. Novak said this recommendation took into account the way the TV allocation system was designed and the stations now in operation.

The "reform" in spectrum a locations, he said, "is certainly long overdue." He said he was "personally struck" during his work on the Task Force by the potentials for mobile communications used by the public, for police and industry."

Questioned again about the recommendation for a new organization in the government for spectrum management, Mr. Novak pointed out that the 15 "high level government officials" who served as the members of the Task Force "were in agreement" on this point, and there "was virtual unanimity." The DTM "had some reservations" since it needed funds for some of its spectrum studies, and, in effect, didn't want to jeopardize getting those funds.

Asked as to whether the government expenditures would be worth the move, Mr. Novak said the benefits "will far exceed the cost of making the spectrum available." The present approach, he said, "is essentially holding back progress," particularly in the mobile radio area, which is "just waiting to break loose" if adequate resources were made available.

The former Task Force Director rejected the idea that the Defense Department would have difficulty in meeting its spectrum needs under the single manager concept. "Defense has done a tremendous job in their management of spectrum," he

said, but "whether they need all they have is another question." He added that "I don't think they would have any problem in getting what they need" in the spectrum field, any more than they have problems in getting what they need in other areas.

In one comment following Mr. Allebrandi's testimony, Representative Hungate said "your examples have put flesh on the bones" of the spectrum problem.

Mr. Reinke, asked by Mr. Hungate to elaborate on one his points, said the International Association of Chiefs of Police feel that the FCC's reservation of the considerable amount of spectrum above 470 megacycles for UHF television is "unrealistic", whereas, "realistically," that band "is where most police agencies are going to have to go."

Mr. Potvin, referring Mr. Reinke to Mr. Key's statement, summarized that he would "like to establish this point with all clarity for the record--in addition to undeniable needs for new uses, your (police) guys on the street today can't get through." The IACP spokesman's response was "exactly."

Asked by Representative Hungate about his reference to the single emergency telephone number, Mr. Reinke said the matter is "of concern" to IACP "because of the way we establish emergency numbers." He said he feels "we're a long way off from a truly universal number, but when, and if, it comes, we're going to have that many more calls to answer by radio."

At the conclusion of Mr. Welch's statement, Representative Conte asked whether the concrete company was experiencing congestion with its radio system, and drew an affirmative answer.

When Mr. Potvin raised his question as to whether a "common user" system would work for the concrete company, Mr. Welch said "we could not go" to a common dispatch system and "would not go. As far as ready mix concrete is concerned," he said, "it would never work."

Mr. Anderson drew relatively little questioning after his statement. He did point out to Mr. Potvin that Arinc's present recognition of the need for 22 megacycles of space in the 900 mc band is in addition to the needs for land mobile frequencies which an air terminal spokesman had told the subcommittee about last year.

The Arinc Chairman said he can "see great usefulness" a plan which would preprocess passengers in the air, as a plane is enroute, so as to americate the "crush" on the ground after they have landed. This would be particularly useful, he said, on international flights, in clearing the passengers through customs, through use of facsimile and well as other communications techniques.

Elaborating on the new Chicago Transit Authority system for Representative Klucznski, who had welcomed him as a witness, Mr. DeMent said the CTA expects much of the system to be in operation this fall, and to be completely finished by next January. The bus system is currently experiencing three or four hold-ups or other "incidents" a day, now, he said, and CTA feels that it is worth its cost if only the emergency value were considered. The CTA Chairman said "all the bus companies around the country are watching us," and "if we're successful," every system will follow suit, "so there will be a definate need for additional frequencies

When Representative Dingell asked whether CTA had encountered any difficulty in getting the frequencies it is using, Mr. DeMent answered negatively, noting

that the Authority had "found sympathetic ears" at the Commission.

FCC Chairman Hyde, sitting in on the CTA demonstration, commented that the Commission has a rulemaking "going" on vehicle locators, and will be "happy to have the benefit of Chicago's experience.

One point of discussion which came up during Chief Krasny's testimony was that of the growing problem of police radio "eavesdropping" by members of the public, which the Ann Arbor official said is "getting serious." Mr. Evans was called upon to explain "scramblers," which he said same in "two kinds": one which does not request additional bandwidth but whose code can be broken; and one which does provide security of communications but which requires greater bandwidth than the ordinary police radio channel.

Mr. Evans agreed with Mr. Potvin that even if the Michigan legislature appropriated funds for scramblers on the police radio systems in the state, they couldn't be used at the present time because frequencies are not available.

Dr. Nagel's description and showing of the portable radio unit he has developed in cooperation with the Miami Communications Department and the Miami Fire Rescue Service was also a high point of interest for members of the Subcommittee.

The Rescue Service, Dr. Nagel pointed out, has a four-minute response time to emergency calls about heart attack victims, and this is within the time the doctor needs to get the heart functioning again, before brain damage is done. The highly trained rescue personnel, he said are capable of following directions from the doctor to affix the necessary EKG probes, transmit the heart information back to the doctor, and then carry out further instructions of some types.

Dr. Nagel told Congressman Dingell that in a city of 1,000,000 people, there are currently 4,000 deaths per year from heart disease of all kinds, and about half of these victims do not get to hospitals, where they can receive treatment, on time. It is "too early" in his program to say how many victims can be saved through use of the new radio equipment, he said, but a rough guess would be 10-15% of those which the rescue service reached in time.

The doctor emphasized that the procedure has a "tremendous value" in addition to the treating of the heart attack victims. "We are connecting two worlds not previously connected," he said, the rescue service and the doctor-hospital world. In the city of 1,000,000, Dr. Nagel pointed out, there are 400 traffic deaths and thousands of traffic injuries a year, and with the acceptance of the validity of the biological transmissions from the scene of the accidents, doctors will be able to direct the giving of blood on the spot, the administering of drugs, and many other things."

"If you will give us two-way voice in addition to EKG," he said, "we can do much, much more. I think this is really a sleeping giant."

When Representative Addabbo noted that New York has had to remove medical aides from ambulances because of shortages of personnel in hospitals, and asked where the properly trained personnel can be found, Dr. Nagel said the community has to want the service and want to pay for it. He envisaged that the properly trained rescue service staff should be paid about twice the amount of the average

ámbulance attendant.

Congressman Addabbo observed on his own that "you couldn't possible share frequencies" for the type of operation under discussion; Dr. Nagel said in the Miami area he is talking about equipping 30 vehicles with the capability; and Mr. Demby translated this to a requirement for five frequency channels.

Mr. Wertheimer expressed the view that the "national implications" of Dr. Nagel's development "appear tremendous."

Asked whether a common user type of system could be used for the EKG operation, Mr. Demby told Mr. Potvin that "we're dealing with lives and time element" and "we can't go through a half dozen people."

Questioned about his own prepared statement on mobile radioteleprinter tests Miami has conducted, Mr. Demby said shared use of a channel, with a voice circuit, was found to be unsatisfactory for Miami, which, he said, would need two charnels to initiate a proposed teleprinter system, and two more in two years, just for the printer operation.

As for other frequency requirements, Mr. Demby said "I know we're going to have to have such as color television from scene of accidents" and such, and "cm channels are loaded now." Whatever relief the teleprinter channels would provide in reducing traffic on the present voice channels, he said, would still leave the voice channels loaded.

Mr. Demby told Mr. Dingell that Miami currently operates six-police-channels, four fire channels, and three local government channels. Asked whether this is "enough," he responded that "We've never seen that point." When Mr. Potvin asked whether the 450 mc split channels "helped," he said "yes, but we were in such tell shape before, we're still in bad shape." The Miami official pointed out that note of the UHF channels between 14 and 20 are being used in his area. —END—

JUNE 26 ANNUAL MEMBERSHIP MEETING OF NABER TO BE 'TRUE WORKING SESSION'

National Association of Business & Educational Radio President John Hodgsct, of United Air Lines, reported this week that the June 26 annual meeting of NABER, at the O'Hare-Concord Motor Inn in Chicago, starting at 9 a.m., will be a "true working session" of those attending.

After brief reports by committee chairmen, of past actions and future proposals, he said, the items will be opened for general audience discussion, with major attention on things which could be of immediate benefit to business radio users. Mr. Hodgson mentioned a special operating manual, a channel captain program, frequency coordination, "nuisance rules elimination," and relaxation of restrictions on some of the 450-470 mc frequencies as subjects of discussion.

James C. McAllister, of McDonnel-Douglas, will serve as General Chairman of the meeting, and the special discussions will be led by Norman Bach, of Monsanto; William Detwiler, Radio Specialists Co.; Robert M. Johnson; and James Bernhart, Motorola--on technical problems, coordination, local organization, and membership aids, respectively.

The NABER Foard of Directors will hold its annual meeting following the class of the general membership meeting. People interested in attending the June 26 session should contact NABER, 1330 New Hampshire Ave., N.W., Washington, D.C. 20136.

several other features helpful to the city. The city went from one frequency retrined to two, experienced an increased flow of information along with "the greater limit it "could still further improve its operations and service to the public if we will obtain an additional frequency channel"—to permit car—to—car communications "without the need of tying up our base transmitter", he said.

"Before obtaining our second frequency channel," Chief Krasny said, "we were him hed down four times", and in "our attempt to obtain a car-to-car frequency chan-lin helded that "we do not have a single television station on channels 14 through 20 -End-

THEK FORCE, JTAC OFFICIALS PUT COMPLEX REPORTS IN SIMPLE TERMS BEFORE HOUSE GROUP

Testimony before the House Small Business Subcommittee on Regulatory Agencies week by Alan Novak, former Staff Director of President Johnson's Task Force on Ally sory Committee, was in a class by itself, as both men explained the recent way of life for managers and users of the radio frequency spectrum.

Mr. Novak, submitting the Task Force's chapter on spectrum management for record of the subcommittee hearings, described how the Task Force had conducted that the members of the group had found the spectrum task most intellectually interesting subject of those which the Task Force had the led.

Answering President Johnson's question as to whether we are making the best him if the spectrum, he said, we discovered quickly that "there is indeed, a problem that we are not making the best use of the spectrum, and that "the increasing demands beyond capabilities under our present the control of the spectrum."

There is no "shortage" of spectrum, Mr. Novak noted—the problem is that is "interference," and the question is "how to permit more people to do things with the spectrum without interference." The "artificial scarcity" has been created under our present management, he said, has created the "how to permit more people to do things with the spectrum without interference." The "artificial scarcity" has been created under our present management, he said, has created the "how to permit more available are applying for the spectrum as they might if more spectrum were available."

The conclusion of the Task Force, he said, was that "no single approach was a time te"—that the tackling of the problem requires several attacks. The organ—but the tackling of the problem requires several attacks. The organ—but the two could use added economic incentives." The Task Force was particularly med about "spectrum waste," he said, and decided that one way to "curb" this the to develop a license fee system with more relationship to the value which the transe gets from his use of the spectrum. Since the government bears the transe of managing the public resource, he said, the Task Force decided that the vernment should be recompensed for its efforts. This fee system, he added, also support the spectrum management effort, "such as JTAC recommends."

Mr. Novak pointed out that the Task Force found itself in "substantial agreewith JTAC on engineering questions. "Our one concern" with the JTAC studies, he with, was that while JTAC has worked to the thrust of "How can we pass the most

IND STRIAL COMMUNICATIONS Weekly Information Service, National Press Bldg., Washington

information by the spectrum," the Task Force conclusions also included a "social value" aspect -- "How can we make the best use of the information that is passed."

And, he said, "when we took the economic and engineering results" together, "we decided that it would be no good unless we had a structure which could implement the substantive proposals we had arrived at," and procedures to carry them out.

The first thing we have to assure, Mr. Novak said, is that the government spectrum management effort has the "right institutional structure," and the consensus of the Task Force members was that the "present structure is not adequate." This, he said, led to the recommendation that a single spectrum management entity be established, and properly funded.

For his part, Mr. Gifford summarized that "To put (its) recommendations in succinct and perfectly clear terms, the JTAC is saying that the time has come to get technically organized for the task of managing this fantastic resource in the public interest. Old time administrative conveniences of long term unfilled reservations no longer can be tolerated. We've got to have tools on hand to do special jobs of cutting and fitting services on a regional basis. We've got to have sound technical guidance available to the spectrum managers to push for more efficient use with the passage of time or even to plan ahead to replace old uses with new uses, wherever new technologies create new demands on the spectrum or new substitutes for the spectrum."

For one thing, the General Electric Communication Products Department General Manager said, JTAC was "well aware that industry laboratories were constantly active in research for new ways to use the radio spectrum to provide new services," and "conducted a qualititive survey among leading firms to get an overall peek at the possible tidal wave that would soon be upon the spectrum manager."

The results, he said, were a "quick overview of what is going on in the laboratories of about 100 leading electronic companies. (It shows) there are many ideas in process to use currently allocated frequencies in new ways. Many of these may fail as business ventures," Mr. Gifford noted, "but even assuming only 10% survive all technical, market and business tests, we will find ourselves challenged beyond our current abilities in spectrum management."

"Along the same theme as the JTAC report," Mr. Gifford said, the testimony of the witnesses before the House subcommittee "also amply illustrate that we have every reason to expect demands on use of the radio spectrum to increase ten-folio again over the next 20 years as they increased ten-fold over the past 20 years. While our economy has expanded many times within the past 20 years, the role that this resource plays in terms of the share it supports has more than doubled to where today it accounts for about 2,5% of the Gross National Product."

The JTAC Chairman declared that "The only impediment to that trend continuing or even accelerating over the next 20 years, is certainly not going to be decay in the imagination and inventiveness of man in finding roles for the spectrum in many more aspects of daily life. The only impediment will be our reluctance to plan ahead—to invest now for a return in the future—to get the technical machinery and human competence in place so that the spectrum managers can be in the position of promoting its use rather than having to cope with its use.

"To do that," he said, "will require an entirely new outlook in funding the

technical foundation for management of this resource. The building of a spectrum engineering capability and facility may now be identified as the key to progress in utilization of the radio spectrum in the public interest. The key will be a new expense in our budget but it will unlock new riches in economic and social welfare."

LMCC, ACTS LARGELY REPEAT POSITIONS IN FCC DOCKETS IN PRESENTATIONS TO SUBCOMMITTEE

Land Mobile Communications Council President Max Guiberson emphasized to the House Small Business Subcommittee on Regulatory Agencies this week that present uses of the radio frequency spectrum will shortly completely exhaust the available supply of mobile radio channels, and the myriad of new uses being developed will be denied the American public entirely unless the FCC carries through on its present spectrum proposals and improves them sufficiently to make realistic use of the new growth space possible.

Mr. Guiberson, Equipment Manager for the State of Washington Department of Natural Resources, in which he is responsible for the budgeting, purchasing and operating of all of the Department's \$8,000,000 worth of equipment, emphasized that LMCC's comments to the FCC on its spectrum proposals had not stressed the numbers game "in light of the apparent universal acceptance of the need for additional frequencies for land mobile based on present congestion as well as future needs."

When the broadcast interests alleged "that present congestion was a myth and that projections of land mobile growth were grossly inflated," in their discussion of the roughly 7,000,000 authorized transmitters by 1980 projected by the FCC Frequency Relief Committee and the Land Mobile Section of the Electronic Industries Association, however, he said, LMCC ran its own study and concluded that by 1980, 10,800,000 transmitters would be authorized "provided adequate frequency allocations were available to permit free land mobile growth."

The LMCC statement to the House group set out the engineering advances which the land mobile people themselves have recommended, persuaded the FCC to adopt, and carried out; , described the complex coordinating procedures which are in effect in many of the radio services; and discussed the further improvements which they have recommended.

"Even if all of these improvements were fully implemented," Mr. Guibersch said, "this would still not result in sufficient additional space with the existing land mobile spectrum to meet even the most conservative growth estimates."

LMCC, he said, supports the Commission's proposals in the 900 megacycle area as a long-range plan for specialized land mobile requirements, but "what is needed to meet the immediate and long-term land mobile requirements is a block of frequencies close to the existing land mobile spectrum so that equipment now in existance can be readily available with little modification."

The computer studies submitted to the Commission by IMCC, it said, demonstrate the fact that "by applying improvements in frequency utilization and management to the broadcast spectrum, a means of accomplishing adequate relief for the land mobile services does exist, without any diminishing of television service."

The Council believes that the geographic sharing proposal advanced by the FCC "should be adopted, with, some modifications, as a necessary but strictly interim step preliminary to the exclusive allocation of the lower seven UHF TV

Tole coment July 22, 1969 MEMORANDUM FOR Mr. Rosel Hyde Chairman Federal Communications Commission In our review of the telecommunications problems facing the Nation and their implications for Government policy, we have found the provisions for introducing communications satellites into U.S. domestic communications to be especially important. To assist the Administration in further reviewing this area, we are establishing a small working group and invite the FCC to participate in any way you deem appropriate. Our objective will be to formulate within about sixty days whatever Administration suggestions or comments may be appropriate. We will be concerned, of course, with the general structure and direction of the industry and not with specific applications pending before the Commission. Clay T. Whitehead Staff Assistant ec; Mr. Flanigan Mr. Kriegaman Mr. Whitehead Central Files CTWhitehead:ed

EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF TELECOMMUNICATIONS MANAGEMENT WASHINGTON, D.C. 20504 OFFICE OF THE DIRECTOR July 22, 1969 Memorandum for Mr. Clay T. Whitehead This is my proposed response to Chairman Dingell. Since he has invited both Commerce and Transportation to appear, I believe it would be inappropriate for this office to fail to be represented. In the absence of any organizational decisions, my position would be that such studies are under way but have not been finalized and any views expressed by me do not necessarily represent the views of the Administration. Attachments

# OFFICE OF TELECOMMUNICATIONS MANAGEMENT WASHINGTON, D.C. 20504

OFFICE OF THE DIRECTOR

July 22, 1969

The Honorable John D. Dingell
Chairman, Subcommittee on Activities of
Regulatory Agencies Relating to Small Business
House of Representatives
Washington, D. C. 20510

Dear Mr. Chairman:

I accept your invitation of July 11 to appear before your Subcommittee on Activities of Regulatory Agencies Relating to Small Business on the reallocation of radio frequencies.

Inasmuch as you pose no specific issues or questions and the provision of frequencies for small business is within the jurisdiction of the Federal Communications Commission, I shall have no prepared statement but shall try to answer your questions. I do expect to have several documents covering the functions and works of this office.

Sincerely,

J. D. O'Connell

THE CHAIRMAN

PATMAN, TEX. WHAT HILL KLUCZYNSKI, ILL. THE DINGELL, MICH. AWOI ,HTIK HITHE CORMAN, CALIF. ATTE DE ADDABBO, N.Y.

L. HUNGATE, MO. O. CONTE, MASS. WORTON, N.Y.

J. BURTON, UTAH M STANTON, OHIO BUTTON, N.Y.

Select Committee on Small Business House of Representatives of the United States

Ninety-first Congress Mashington, D.C. 20515 July 11, 1969

COMMITTEE OFFICE 2361 RAYSURN HOUSE OFFICE BUILDING 225-5821 AREA CODE 202

BRYAN H. JACQUES STAFF DIRECTOR AND GENERAL COUNSEL

Mr. James D. O'Connell Director of Telecommunications Management Office of Emergency Preparedness Executive Office Building Annex Washington, D. C. 20504

Dear Mr. O'Connell:

An additional day of hearings has been scheduled for Tuesday, July 29, 1969, by the Subcommittee on Activities of Regulatory Agencies Relating to Small Business on the reallocation of radio frequencies.

We will appreciate your appearing before that subcommittee at 11:30 a.m. on that day to give your testimony. Kindly advise whether this date and time is convenient, and whether you yourself will appear or whether you will designate someone else to appear in your stead.

We would appreciate having your statement on file 48 hours in advance of the hearing. Your cooperation will be greatly appreciated.

Sincerely yours

John D. Dingell, Chairman Subcommittee on Activities of Regulatory Agencies Relating to Small Business

July 23, 1969 MEMORANDUM FOR BILL TIMMONS You will recall that approximately one month ago we negotiated an agreement with Congressman Dingell to postpone for one month hearings on frequency allocation for his Small Business Committee. The reason was a jurisdictional dispute with the Commerce Committee and their feeling that the Administration should first testify on these matters before them. Our month of grace has elapsed and we are no nearer a position on this question. I have therefore talked with Bob Guthrie of the Commerce Committee and they are agreeable to our testifying before Dingell on an informational basis. I have passed this information along to the DTM, to Commerce, and to Transportation. The hearings are scheduled for July 29. Clay T. Whitehead Staff Assistant cc: Mr. Flanigan Mr. Whitehead Central Files CTWhitehead:ed

### MEMORANDUM FOR THE RECORD

SUBJECT: MEETING - July 10, 1969

PRESENT: Messrs. Macy, Schildhause, Coston, Roth,

Penwell and Button

PROJECT A: CPB Programming Responsibility for

presently un-used channels in a selected

CATV Franchise Area

Action: NCTA to produce further 20 localities and

note unused channel capacity.

CPB to propose preferred locality for

initial effort

CPB to consider budget and project manager

for initial effort.

PROJECT B: Selection of locality where an ETV station

can become franchisee, thus developing

its own revenue source.

Suggested areas: Oakland

San Jose Framingham

South Boston

Action: CPB to consult with ETV station managers

to determine interest.

PROJECT C: Installation of CATV in Model Cities Program

Action: CPB consultation with government agencies

concerned, re joint funding.

NOTE: Public announcements regarding any of above?

July 23, 1969 MEMORANDUM FOR RON ZIEGLER Attached is a memorandum sent to the Chairman of the FCC informing him that the Administration intends to conduct a 60-day review of what should be our policies with respect to the introduction of communications satellites into the U. S. domestic communications industry. This will be of interest primarily to the trade press and the business periodicals and we are not seeking publicity. However, I thought you should know about this in case you not some questions since it is of considerable interest in the communications industry. The important points to note are (1) This is not a criticism of the FCC or any tentative FCC conclusions, but is rather simply in response to the Administration's general responsibility to contribute to a sound approach to this important policy question; (2) The Administration will in no way be concerned with which companies are allowed to enter this area or what specific authorizations they might receive, but rather with general policy and the institutional and economic structure of the industry; (3) The FCC has agreed to cooperate with us; (4) Industry will be consulted as a matter of course. Clay T. Whitehead Staff Assistant Attachment cc: Mr. Flanigan Mr. Whitehead Central Files CTWhitlehead:ed

July 22, 1969

#### MEMORANDUM FOR

Mr. Rosel Hyde Chairman Federal Communications Commission

In our review of the telecommunications problems facing the Nation and their implications for Government policy, we have found the provisions for introducing communications satellites into U. S. domestic communications to be especially important.

To assist the Administration in further reviewing this area, we are establishing a small working group and invite the FCC to participate in any way you deem appropriate. Our objective will be to formulate within about sixty days whatever Administration suggestions or comments may be appropriate. We will be concerned, of course, with the general structure and direction of the industry and not with specific applications pending before the Commission.

Clay T. Whitehead Staff Assistant

Thecomment.

## THE WHITE HOUSE

September 5, 1969

#### MEMORANDUM FOR

Dr. Myron Tribus
Assistant Secretary of Commerce
for Science and Technology

Communications capabilities are particularly important to Alaskans, and significant expansion of communication facilities will take place in the near future, with or without adequate planning. Alaskan state government officials have requested assistance in developing costs and evaluating alternative plans for development of intrastate communication services. This should include a survey of needs and opportunities for telecommunications services, alternative technologies and systems for providing those services, and their costs.

However, the type of planning needed is not commonly done in the communications industry because of the incremental growth of the already highly developed communications systems in the continental United States. Because of the increasingly rapid technological and economic change in the telecommunications field, such planning will become increasingly necessary for U. S. communications generally. This situation, therefore, offers an opportunity to stimulate within the communications field more thinking about such problems, as well as being of assistance to the state of Alaska.

I would appreciate it if you would undertake to organize and chair an interdepartmental study to achieve these ends. The study should be organized under the auspices of the Office of Intergovernmental Relations and in cooperation with the Federal Field Committee for Development Planning in Alaska.

Some time this week you should discuss with Governor Boe how coordination with state officials can best be effected. Following that, I would like to introduce you to the Alaskan Congressional delegation so that you can explain the direction of your effort.

Clay T. Whitehead

ce: Mr. Flanigan
Governor Nils Boe
Eugene Cowen (WH)
Mr. Kriegsman
Mr. Gabel
Mr. Hinchman
Mr. Whitchead
Central Files

CTWhitehead:ed

EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF TELECOMMUNICATIONS MANAGEMENT WASHINGTON, D.C. 20504 OFFICE OF THE DIRECTOR December 12, 1969 Honorable Dean Burch Chairman Federal Communications Commission Washington, D. C. 20554 Dear Mr. Chairman: This letter is to follow up past informal discussions with FCC staff representatives regarding a problem of interference to one of the radio frequencies used for communicating with the Presidential aircraft. Pursuant to its commitments with the Department of the Air Force, the Motorola Company has stockpiled mobile radio equipments ready to meet sudden unforeseen communications requirements. These equipments are properly crystallized on frequencies in the 162-174 MHz Government frequency band. On at least two occasions - the funeral ceremonies for the late Senator Robert F. Kennedy in Washington and for the late President Dwight D. Eisenhower in Abilene, Kansas local non-Government authorities called upon the Motorola Company to provide mobile communications equipment for temporary use on short notice. Equipments provided on both these occasions were crystallized in the 162-174 MHz band and both times a frequency assigned for the Presidential aircraft was sought for temporary use by the non-Government interest involved. As the result of prompt action on the part of the FCC and the OTM, problems were averted on the two occasions cited above. However, there does appear to be a genuine requirement for a stockpile of mobile communications equipments to be available for non-Government users to employ under unusual conditions.

It is suggested that the Commission specify other frequencies, preferably in non-Government bands, for such purposes. We shall, of course, assist the Commission within our capability. Such action would prevent what could at some time be a serious harmful interference situation.

As a matter of interest, additional background information on this subject is summarized on pages 3 and 4 of the minutes of the Interdepartment Radio Advisory Committee (IRAC) meeting of June 11, 1968.

Sincerely,

W. E. Plummer

Acting

cc: Mr. Clay T. Whitehead

January 30, 1970 Mr. William Plummer To: From: Tom Whitehead Attached is a draft of a memorandum I considered sending Burch. On reflection, it struck me as not particularly appropriate in spite of the fact that it is a point worth making. Would you please consider pointing out the substance of this to the Commission in an appropriate way. Attachment

DRAFT 1/30/70

MEMORANDUM FOR DEAN BURCH

In his letter to you of January 27, 1970, W. E. Plummer,
Acting Director of Telecommunications Management, has pointed
out the concerns of the executive branch insofar as defense and
emergency preparedness communications are concerned in the
proposal of the City of Anchorage, Alaska, to install a step-by-step
toll switching system. I trust that the Commission in its consideration
of this matter will give full consideration to the requirements of the
executive branch in this matter along with performance and cost
considerations in deciding what investments are in the public
interest.

Mr. Plummer also stated his belief that a single long-haul system under centralized planning and operational authority will result in more efficient and less costly service than would a "fragmented approach." This should not be construed that this the Administration's feeling is that centralized ownership, planning, and operation of all telecommunications services is in the best interests of a long-run, healthy, and innovative the telecommunications industry or in the public interest.

OFFICE OF TELECOMMUNICATIONS MANAGEMENT
WASHINGTON, D.C. 20504

Tapes

OFFICE OF THE DIRECTOR

January 27, 1970

Ref.: RCA Alaska Communications, Inc. File No. P-C-7587

Honorable Dean Burch Chairman Federal Communications Commission Washington, D.C. 20554

Dear Mr. Chairman:

The strategic location of the State of Alaska causes the national security implications of the intra- and interstate long haul transmission and switching capability provided in the State to be of unique concern to this office. The scarcity of redundant routing which causes primary reliance on single toll trunking routes and the remoteness from sources of supply to fill requirements for men and materials required for restoration of significant loss in such a system make it in the Nation's and State's interest that, insofar as practicable, the communications system of Alaska be the most modern and efficient available in the current state of telecommunication technology.

The urgent requirement for a modern, latest state of the art, Alaska Communication System, has been supported by the Alaskan Congressional Delegation, the Governor of Alaska and Senior Military Leaders concerned with the security of Alaska.

In my letter of October 7, 1969, to the Chairman of the FCC, I also expressed concern that the network characteristic and capability of the (national) telecommunications system be preserved.

In RCA Alascoms' opposition to the "Petition to Deny and Request for Other Relief," filed by the City of Anchorage, November 26, 1969, page 25, it is stated that the Anchorage Telephone Utility plans to install a step-by-step toll switching system. This appears to be a step backward in the provision of modern telephone service to and within Alaska. This conclusion is based upon the following data:

1. Step-by-step switches present problems to data transmission due to the many large magnets, high currents and steep wave fronts found in this equipment.

- 2. There are economic penalties connected with arranging such equipment to accommodate touch tone signaling and to work with the type of multi-frequency signaling involved in toll systems.
- Utilization of step-by-step machines would present a 3. major problem in the use of CCITT #6 signaling on satellite channels.
- 4. Non-common control systems (step-by-step) do not lend themselves to the quality and diversity of today's calling services.
- 5. Step-by-step operations entail disproportionally high maintenance costs.

It is worth noting that it has been several decades since the last step-by-step toll train for use in interstate service was installed by the Bell System. There are very few in service now, and their use is limited to call completion. They are presently scheduled for replacement by crossbar or electronic switching machines.

I invite your attention to these considerations in order that you will be aware of our concern and that the disadvantages of the proposal of the City of Anchorage will receive full consideration in the Commission's deliberations relative to issuance of authorization to provide the intertoll switch at or near Anchorage.

I reiterate my belief that a fragmented approach to the provision of telecommunications service will, in the long run, result in a less efficient and more costly service than a single long haul system under centralized planning and operational authority.

Sincerely,

W. E. Plummer

ON S Schummer

Acting

cc: Honorable Mike Gravel Honorable Theodore F. Stevens Honorable Howard W. Pollock Honorable Keith Miller

Hon, Philip N. Whittaker Hon. George M. Sullivan

Federal Field Committee for Development Planning in Alaska RCA Alaska Communications, Inc. Matanuska Telephone Assoc., Inc. Dr. Clay T. Whitchead Public Service Commission of Alaska

EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF TELECOMMUNICATIONS MANAGEMENT WASHINGTON, D.C. 20504 OFFICE OF THE DIRECTOR February 6, 1970 MEMORANDUM FOR DR. CLAY T. WHITEHEAD The attached copy of letter to FCC Chairman Burch I trust meets the intent of your memorandum of January 30. It was coordinated with Mr. Bernard Strassburg who felt that while not essential it might be helpful to the Commission. To go beyond what we have said could negate intent of our letter of October 7 to the Commission in response to your memorandum of September 26 about RCA's concern that the ACS sale agreement might be changed by FCC action. W. E. Plummer Acting Atchs.

# OFFICE OF TELECOMMUNICATIONS MANAGEMENT WASHINGTON, D.C. 20504

OFFICE OF THE DIRECTOR

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February 6, 1970

Honorable Dean Burch Chairman Federal Communications Commission Washington, D.C. 20554

Dear Mr. Chairman:

To prevent possible misunderstanding, I should like to clarify the last paragraph of my letter to you dated January 27, 1970, concernating File No. Pacar587.

My remarks were directed only to the long haul transmission and switching arrangements which will provide international and interstate telephone service. The operational objective of such a system should be that it function as though it were a single system. The advantages of centralized planning and operational authority are obvious when compared to a system planned and operated by a number of subsystems, each functioning as a unique entity.

This is not to imply that the Administration's feeling is that centralized ownership, planning and operation of all telecommunications services is necessarily in the public interest.

In addition to distribution indicated on the basic correspondence, copies of the basic letter plus this clarification have been sent to the Counsels for the Western Union International, Inc.; Anchorage Telephone Utility; Western Union Telegraph Company; and RCA Alaska Communications, Inc.

Sincerely,

W. E. Plummer

Acting

cc: Dr. C.T. Whitehead

January 27, 1970

Ref.: RCA Alaska Communications, Inc. File No. P-C-7587

Honorable Dean Surch Chairman Federal Communications Commission Washington, D.C. 20554

Dear Mr. Chairman:

The strategic location of the State of Alaska causes the national security implications of the intra- and interstate long haul trans-mission and switching capability provided in the State to be of unique concern to this office. The scarcity of redundant routing which causes primary reliance on single tell trunking routes and the remoteness from sources of supply to fill requirements for men and materials required for restoration of significant loss in such a system make it in the Nation's and State's interest that, insufar as practicable, the communications system of Alaska be the most modern and efficient available in the current state of telecommunication technology.

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Subj File

- 2. There are economic penalties connected with arranging such equipment to accommodate touch-tone signaling and to work with the type of multi-frequency signaling involved in toll systems.
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I invite your attention to these considerations in order that you will be aware of our concern and that the disadvantages of the proposal of the City of Anchorage will receive full consideration in the Commission's deliberations relative to issuance of authorization to provide the intertall switch at or near Anchorage.

I reiterate my belief that a fragmented approach to the provision of telecommunications service will, in the long run, result in a less efficient and more costly service than a single long haul system under centralized planning and operational authority.

Sincerely,

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W. E. Plummer Acting

cc: Honorable Mike Gravel
Honorable Theodore F. Stevens
Honorable Howard W. Pollock
Honorable Keith Miller
Dr. Clay T. Whitehead
Hon. Philip N. Whittaker

Federal Field Committee for Development Planning in Alaska RCA Alaska Communications, Inc. Matanuska Telephone Assoc., Inc. Public Service Commission of Alaska

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# OFFICE OF TELECOMMUNICATIONS MANAGEMENT WASHINGTON, D.C. 20504

October 7, 1969

OFFICE OF THE DIRECTOR

Honorable Rosel H. Hyde Chairman Federal Communications Commission Washington, D.C. 20554

Dear Mr. Chairman:

I am forwarding herewith a letter from the Department of Defense (DOD) reaffirming its position with respect to the award of a license by the FCC for a microwave system between Anchorage, Alaska, and the satellite earth station to be located at Talkeetna. The DOD position is supported by valid justification, and we fully support the belief that it is most essential that RCA, as a purchaser of the Alaska Communications System (ACS), be given an opportunity to develop a viable communications system for Alaska without fragmentation of the system by introducing other long haul common carriers during the critical early years.

The long haul telecommunications system of any area is the nervous system supporting the national security and related governmental functions in the area. The State of Alaska is no exception and the integrity of the system must be maintained. There is need for a carrier with the capability of, and with the clear mandate and prerogative for planning a single integrated system which will continue to provide service to the extensive national security activities distributed throughout the State of Alaska.

As indicated in the ODTM dissent to the Report of the Rostow Task Force, the National Plan for Emergency Preparedness includes the following Presidential policy:

"The telecommunication resources of the Nation would be available for use by the Government in time of emergency, contingent upon the nature and extent of the needs of the public welfare for continued service."

"It is of the utmost importance that the network characteristic and capability of the telecommunication system be preserved to the greatest degree possible during a national emergency."

In consideration of this policy, the competitive bidding process through which the ACS was offered, was designed to produce as the successful bidder that applicant which could best provide a communications system for Alaska and which would make the greatest contribution toward the welfare of Alaska. Great weight was given in the competitive bidding process to offers to reduce rates and improve and expand the system. RCA proposed to purchase the ACS for \$28.4 million, to make improvements of \$27.6 million over the first three years, and to cut rates by almost one-third. RCA recognized that it would operate at a loss initially, but was willing to place enormous sums at risk on the basis that it was bidding to be the long lines carrier in Alaska.

In view of the foregoing, it would appear essential, at least for the first few years of transition from ACS operation to the status of a regulated public common carrier, to afford the maximum opportunity for integrated system planning and the development of a cohesive, economically viable system.

Our real concern is that should the FCC approve a number of competing applications for various communications links in Alaska, it would seem difficult and unfair to hold RCA to their prior commitments. Because of the increasingly commercial aspects of ACS operations, the DOD worked for over ten years to divest itself of it to private enterprise. If the terms of the sale are impaired to the extent that the contract is not consummated on July 1, 1970, results would include that the ACS would remain with the DOD and that the improvements included in the sale arrangements would be delayed substantially. I ask, therefore, that in your deliberations concerning the award of a license for the Talkeetna-Anchorage microwave link, full consideration be given to the effects outlined above, that could result from the award of a license to other than RCA.

Sincerely,

W. E. Plummer Acting Director

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Attachment



### OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE WASHINGTON, D.C. 20301

INSTALLATIONS AND LOSISTICS

3 OCT 1969

Mr. William E. Plummer
Acting Asst Director/Director of Telecommunications Management
Executive Office of the President
Office of Emergency Preparedness
Washington, DC 20504

Dear Mr. Plummer:

The Communications Satellite Corporation (COMSAT) is installing an INTELSAT earth station at Talkeetna, Alaska, with a scheduled operational date of 1 July 1970.

RCA Global Communications, Western Union International (WUI), COMSAT, and Matanuska Telephone Company have submitted individual Filings to the Federal Communications Commission (FCC) to provide the microwave link between the earth station and Anchorage, Alaska (FCC File Nos. T-C-2274).

On 29 May 1969 the Department of Defense (DoD) submitted Enclosure 1 to the FCC, stating its position on the microwave link. We believe it is most essential that RCA, the purchaser of the Alaska Communications System (ACS), be given the opportunity to develop a viable commercial communications system for Alaska without competition from other common carriers during the critical first few years that they will need to meet the obligations which they accepted upon notification by the Air Force of the award to them of the sale of the ACS. Copies of this information have been provided to FCC by separate means.

The foregoing arrangement will ensure that the urgently needed communications for Alaska can be developed and provided in a timely and cost-effective manner. Furthermore, this arrangement would preclude jeopardizing the many contractual and operational requirements which must be satisfied prior to the turnover of the ACS to RCA by July 1970. With regard to communications costs, the purchaser of the ACS is obligated to drastically reduce the leased costs over the first three years

of operation. This can best be accomplished by allowing one common carrier, the purchaser of the ACS, to initially develop and implement the system as a whole.

We urge that you support the DoD position on this matter and inform the Chairman, FCC, accordingly.

Sincerely,

HAROLD W. GRANT

Harried W. Grant

Lieutenant General, USAF (Ret)

Director for Telecommunications

Policy

Enclosure

Dept of Army 29 May 69 Ltr to FCC



## OFFICE OF THE JUDGE ADVOCATE GENERAL WASHINGTON, D.C. 20310

U 801 JAGU 1969/9872

29 May 1969

Mr. Ben F. Waple Secretary Federal Communications Commission Washington, D. C. 20554

Re: Application of Communications Satellite Corporation for Authority to Construct a Microwave Link between the Propose' Talkeetna Earth Station and Anchorage, Alaska, FCC File No. 65-CSG-P-69

lear Mr. Waple:

As dul, authorized counsel for the Secretary of Defense, I wish to express the Defense interest in the above-entitled application of the Communications Satellite Corporation for authority to construct a microwave link between the proposed Talkeetna Earth Station and Anchorage, Alaska.

The Department of Defense supports the need for the establishment of a microwave link between the earth station at Talkeetna and Anchorage and urges the Commission to grant the necessary authority provided the following provisions are included in the Commission's Order establishing the facilities:

a. That the proposed microwave link be provided by the buyer of the ACS if selected in sufficient time to enable construction to meet scheduled operational date of the Earth Station; or alternatively, that COMSAT transfer both ownership and operation of the terrestrial facilities to the Alaska Communication System or to the successful buyer of the ACS not later than 1 July 1970.

U 801 JAGU 1969/9872 Mr. Ben F. Waple

29 May 1969

b. That the order direct that the interface of the microwave facility with the Alaska long lines system be located at an established ACS facility, specifically the ACS Anchorage Toll Center.

The Department of Defense believes that the above provisions are necessary to protect not only the purchaser of the ACS, but also the people of the State of Alaska. In this connection, I might point out that the final evaluation of the four offers to purchase the ACS is currently in progress and the matter is expected to be sent to the President for selection of the purchaser on or before 1 July 1969.

I will be pleased to furnish any additional information you may desire.

Sincerely yours

CURTIS L. WAGNER, JR.

Chief, Regulatory Law Division

cc: Lawrence M. DeVore
Assistant General Counsel
Regulatory Matters
Communications Satellite Corporation
950 L'enfant Plaza South, S. W.
Washington, D. C. 20024

### THE WHITE HOUSE WASHINGTON

September 26, 1969

### MEMORANDUM FOR GENERAL O'CONNELL

RCA Global Communications has expressed to me their concern about competing applications filed with the FCC for microwave communication links between the Talkeetna Earth Station and Anchorage. They point out that in the ACS sale agreement they made commitments for system improvements, service extensions, and cost reductions that were based on an entire system plan. Should the FCC approve a number of competing applications for various communication links in Alaska, it would seem difficult or unfair to hold RCA to their prior commitments. If you think it would be advisable, could you work with the Air Force to prepare a letter to the FCC stating the terms of sale for the ACS, the nature of RCA's commitments, and a statement to the effect that these facts should be considered in future FCC hearings. I do not think we want to take the position that the RCA plan is inviolate or that RCA has a monopoly position in Alaska communications, but should simply indicate that RCA's commitments were based on certain assumptions that may not hold, depending on FCC decisions.

Governor Scranton needs to make sure that Department of Defense views regarding the INTELSAT negotiations are adequately represented. He is proceeding on the assumption that your office is providing DOD representation in the INTELSAT delegation. Could you, by memorandum or phone call, reassure the Governor that this is the case and tell him what continuing arrangements will be made after October 1st.

Staff Assistant

Chron

July 16, 1970

Dear Mr. Cintyman;

In respense to your request during this morning's heaving. I am submitting my views on the \$905,000 for improved electromagnetic compatibility analysis expabilities included in the President's FY 71 budget resemmendations. Now that Reorganization Plan No. 1 of 1970 has gone into effect and I have been nominated to be Director of the new Office of Telecommunications Policy. I have been reviewing the Administration's budget recommendations in this area and the recent actions by the House and Schate. As this matter goes to Conference, I am pleased to have the opportunity to submit my views for the record.

Your opening statement at this morning's hourings stated very clearly and accurately the importance of better spectrum manageriment. We may not have an immediate spectrum crisis, but the rapid and dynamic growth of telecommunications in this country is placing accelerating demands on spectrum resources. Although not all of our available spectrum resources are being fully utilized, existing allocations have resulted in artificial shorteges that impose economic pensities and make impossible the introduction of some new services. Our existing frequency management machinery is increasingly hard pressed to deal with the expansion of spectrum demands. I regard the improved coordination of spectrum allocation as one of the most important areas of telecommunications policy. We must begin now to improve these techniques or these actually will be a spectrum crisis in the not too distant fature.

I recognise, as does the Congress, that the development of a comprohencive this base and analytic capability will require the expenditure of Federal fonds, and that those expenditures roust be justified in terms of the tragible benefits this activity will produce. A very direct benefit will be more finished and responsive use of our existing spectrum resources. Improved management of spectrum use and allocations also will encourage better planning by system designers both in government and in industry. Both of these steps are essential to a more efficient use of the spectrum, melting spectrum resources available to accommodate both existing needs and the demand for now pervices that are developing for the future.

With respect to this electromagnetic composibility analysis effort, it is not our intention to establish any new facility or organisation which would require legislative authorization. Rather, we intend to develop the recessary analytic techniques, data base, and processing capabilities to provide the information necessary for the Office of Telecommunications Policy to achieve more officient use of the spectrum.

I wish to emphasize that we still consider the full funding of \$3.3 million is vitally important to the development of an effective telecommunications policy program during the forthcoming year. The electromagnetic compatibility functions referred to above would, in large recessive, be carried out through the Department of Commerce under OTP guidance. The \$966,000 appropriation request is the essential first step to get started in this area.

Sincercky,

Clay T. Whitcheed Epocial Assistant to the President

Honorable John O. Pastore Chalmnan Subcommittee on Communications Committee on Appropriations United States Sonate Washington, D. C.

cc: Mr. Whitehead Central Files Mr. Flanigan Mr. Timmons Hon, George Shultz Sen, Gordon Allott Cong, Joe Evins

William Plummer Bill Morrill

Cong. Charles Raper Jones