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RADIO FREQUENCY ALLOCATION IN THE PUBLIC INTEREST: FEDERAL GOVERNMENT AND CIVILIAN USE*

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INTRODUCTION

It has long been recognized that the radio frequency spectrum is a vital natural resource requiring government allocation and regulation.¹ The resource is a fixed or finite one, and has many claimants for its use. Moreover, as the Communications Satellite Program demonstrates, the problem of physical limitation is an accelerating one, as new uses increase the saturation of available spectrum space. Indeed, President Truman's statement of fifteen years ago would appear particularly appropriate today. At that time, February 17, 1950, Mr. Truman said:

The most pressing communications problem at this particular time, however, is the scarcity of radio frequencies in relation to the steadily growing demand. Increasing difficulty is being experienced in meeting the demand for frequencies domestically and even greater difficulty is encountered internationally in attempting to agree upon the allocation of available frequencies among the nations of the world.

In the face of this growing shortage the problem of assuring an equitable distribution of the available supply of frequencies among all claimants, both Government and private, is rapidly assuming major prominence.²

* This article is a portion of a study which was conducted under contract with Motorola, Inc. The authors enjoyed complete freedom to conduct this study as they saw fit. In consequence, Motorola, Inc. is not responsible for the analyses and conclusions herein.

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1. See, e.g., Report, "Satellite Communications," of Military Operations Subcommittee of the Committee on Government Operations, October 1964, [Subcommittee Print], pp. 75-87.

2. Quoted in Hearings, Subcommittee of the Committee on Interstate and Foreign Commerce of the House of Representatives, 86th Cong., 1st Sess., June 8, 9, 1959, p. 23.

It is difficult enough to allocate a scarce resource which is subject to increasing demands. Were there no other problem, the United States Government would have difficulty enough to divide the radio spectrum among the competing demands of television broadcasting, mobile land service, satellite commercial communications, and the other legitimate uses which constantly call for greater frequency allocations. When to these pressures there is added the competition of Federal Government use of radio frequencies for national security reasons, it is apparent that the problem of organization and management requires the most efficient, effective and equitable system of distribution and control of frequencies as can be accomplished in the public interest.³

At present, government management is bifurcated. The Federal Communications Commission is charged with responsibility for the assignment and regulation of frequencies utilized by domestic private users, and state and local government users (including police, fire department, *etc.*),⁴ whereas the President is responsible for the allocation of frequencies to Federal Government users. This latter responsibility the President has delegated to the Director of Telecommunications Management with the assistance of the Interdepartment Radio Advisory Committee (IRAC).⁵ Dual control engenders inevitable conflicts, which are compounded when different standards and procedures are employed by the different control bodies.⁶ As Mr. Fellows of The National Association of Broadcasters pointed out in the 1959 Hearings on Spectrum Allocation:

The basic problem, here, lies in the fact that there are two users of vital spectrum space—[Federal] Government and non-Government [civilian]—with each of them operating under different ground rules.

The non-Government [civilian] users of the spectrum must justify to the Federal Communications Commission in public proceedings their need for and utilization of the portions of the spectrum which may be allocated to their particular services.

. . . .

However, although all the non-Government [civilian] users present information of use and justification for what they request in the spectrum, similar information is not submitted with respect to the [Federal] Government use of the spectrum which might indicate how the entire natural resource could best be

3. *Id.* at 24 (testimony of Mr. Stewart).

4. Federal Communications Act of 1934, Secs. 301, 303. Throughout this study, the term "civilian" will be employed to characterize those who must secure F.C.C. authorization for frequencies, *etc.*, while "Federal Government!" will be used to describe those who receive authorization from the President.

5. See Executive Order 10995.

6. See Report, note 1, at 86.

utilized. The [Federal] Government users are not required to justify before Congress, public opinion, or any impartial body, their use of frequencies.⁷

It can thus be seen that while the allocation of radio frequencies, because of the increasingly pressing demands of both Federal Government and civilian, poses serious problems, the unusual aspect of the problem of radio frequency allocation is that there is no organized procedure for assessing the competing demands of Federal Government and civilian use. Instead of a management structure which assigns the available supply of frequencies among all claimants in accordance with a judgment as to how best the public interest may be served, the claims of Federal Government use are "negotiated" between the President's designated agent and the Federal Communications Commission rather than subjected to comparative examination with other competing uses in an effort to determine wherein lies the public interest.

There can be no doubt, of course, that the security of our country is a paramount consideration in any assessment of the public interest in the allocation of radio frequencies, as it is in the allocation of other scarce resources, including manpower and materials. It is likewise undoubted that it is not the solitary consideration that the problem here, as in so many other fields, is to allocate resources so that just proportions shall go to deserving users, so that a fully informed judgment of the public interest may be made in any allocation decision, and, most important of all, so that any potential user should have the same opportunity to make a case for allocation of resources as any other user.

This study has for its purpose an evaluation of the efficacy of the present system of radio frequency allocation between Federal Government and civilian use. It will examine the history of the present system of radio frequency allocation; describe the present allocation and assignment practices; evaluate the present system in terms of the public interest; and, finally, make such recommendations for improvement in the present system as are indicated.

I. HISTORICAL BACKGROUND

This section will trace the origins and development of the current scheme of frequency assignments in both the Federal Government and civilian spheres.

A. 1910-1926

The earliest federal law having any relation to radio communication was the Act of June 24, 1910,⁸ as amended by the Act of July 23, 1912.⁹

7. Hearings, note 2, at 36.

8. Wireless Ship Act of 1910, 36 STAT. 629.

9. 37 STAT. 199.

This legislation, however, was neither of a regulatory nor a licensing character and had no provision with respect to the assignment of radio frequencies. Rather, the legislation was addressed to safety requirements, necessitating installation of wireless apparatus and operators on large seagoing passenger vessels. The Act of 1912 extended the requirement to large cargo ships and made both Acts applicable to the Great Lakes. Enforcement was placed in the Secretary of Commerce and Labor, who at that time administered the domestic maritime navigation laws.

Even as early as 1912, however, the general use of the wireless, particularly as an aid to maritime use, had increased until some form of regulation became imperative. Radio interference from ship and shore stations had affected the radio activities of the Army, Navy and Coast Guard.¹⁰ The Radio Act of 1912¹¹ was the result of this situation. The purpose of the Act was set forth by the Senate Committee which reported out the bill:

Radio communication has already demonstrated its value as an agency for promoting the security of life and property at sea, and under proper supervision and regulation that value can be greatly increased. The most important purpose of this bill is to regulate that agency so as to attain that end so far as the committee by past experience has been able to judge situations which have arisen and provide for situations which may arise calling for its use.¹²

In its regulatory and licensing features the Act was the "first comprehensive piece of national legislation specifically directed toward the control of radio communications."¹³

The text of the Act is summarized in the margin.¹⁴ Significantly for

10. DAVIS, *LAW OF RADIO COMMUNICATION* 33 ff. (1927).

11. 37 STAT. 302.

12. S. Report No. 698, 62d Cong., p. 5.

13. MACQUIVEY, *FREQUENCY ASSIGNMENT ADMINISTRATIVE CONTROL* 59 (1956).

14. Section 1 of the Act required that any person, company or corporation obtain a license from the Secretary of Labor and Commerce before engaging in any form of interstate or foreign communication by radio at any place within the jurisdiction of the United States except the Philippine Islands. Section 2 authorized the Secretary to prescribe the form and restrictions of a license, and provided that the license should specify the location and ownership of a station, and "shall state the wave length or the wave lengths authorized for use by the station for the prevention of interference and the hours for which the station is licensed for work." Section 2 also contained a clause authorizing the President in time of war, public peril or disaster to take over the operation of any station or its apparatus upon just compensation to the owners. Section 3 required that the communications apparatus be at all times in the charge of a person licensed for that purpose by the Secretary.

Section 4 prescribed detailed regulations for station operation, which were intended to minimize interference. Significantly, the first regulation prohibited licensed stations from using any wave length between 600 and 1600 meters since that band had been reserved

present purposes, however, section 2 contained a clause authorizing the President in time of war, public peril or disaster to take over the operation of any station or its apparatus upon just compensation to the owners [the forebear of section 606 of the Communications Act of 1934]. In addition, a regulation promulgated pursuant to section 4 prohibited licensed stations from using any wave lengths within a band reserved specifically for Federal Government use.¹⁵

It should be noted that the 1912 Act, though a licensing act, did not specifically confer upon the Secretary the authority to assign frequencies. As will be later observed, the question of whether the power to license was ministerial or discretionary loomed very important in the 1920's.¹⁶ In the 1912 Act, however, there was sown the seed of separate treatment of Federal Government and civilian allocations. Civilian use was subject to the licensing provision, Federal Government use was not.

The Act presented no regulatory nor allocation problems at its inception, since marine and amateur interests were the primary users of radio communications. According to one authority:

At first, the regulation of radio in the United States was largely perfunctory. No great problems of interference arose, since the number of frequencies was ample for the stations then in existence. Regulations consisted merely of safeguarding established services from unlicensed operation, inspection of radio apparatus, and checking the emission of radio stations to see that they conformed to required standards.¹⁷

The advent of commercial broadcasting in 1921, however, brought problems which were not contemplated when the 1912 Act was passed. To accommodate broadcasting stations, the Secretary designated 360 meters and later 400 meters as suitable for broadcasting and licensed all such stations to operate on these two channels. No attempt was made to assign a separate channel to each station; rather, the wave lengths were assigned to all in a group.¹⁸ The result was inevitable: "The group policy of allocation to several hundred stations attempting to operate simultaneously on two frequencies resulted in intolerable interference to the detriment of the listening public."¹⁹

for Federal Government use in both the Berlin and London conventions. Other regulations prescribed the use of "pure," "sharp," and "standard distress" waves, and authorized by implication amateur operation below 200 meters. Other sections of the Act made willful interference by a radio operator a misdemeanor (section 5), defined radio communication (section 6), and prohibited the transmission of fraudulent distress signals (section 7). See WARNER, RADIO AND TELEVISION LAW 757-62 (1953).

15. Regulation No. 1. See WARNER, *ibid.*

16. *Ibid.*

17. HERRING & GROSS, TELECOMMUNICATIONS 240 (1936).

18. DAVIS, note 10, at 40.

19. WARNER, note 14, at 761-62.

The problem of interference, furthermore, was not confined to private broadcasting, but extended as well to the broadcasting activities of Federal Government agencies within the bands reserved for their use by the 1912 Act. Without even licensing restrictions to prescribe wave lengths for specific use, *i.e.*, to divide up the Federal Government allocation among users, various government stations operated anywhere within the bands reserved to government under the 1912 legislation. And, World War I had accentuated the problem by increasing Federal Governmental radio activity.²⁰

The Secretary of Commerce moved to combat the chaotic condition, albeit by separate means in the Federal Government and civilian spheres. Thus, organization of radio-frequency assignment procedures respecting broadcasting activities of Federal Government agencies was sought in the creation, on June 1, 1922, of the Interdepartment Radio Advisory Committee (IRAC). Inasmuch as the Secretary at that time had the duty of administering the Marine Navigation Laws, the Wireless Ship Acts and the Radio Act of 1912, it was natural that he should take the lead in forming IRAC. The Committee, which was composed of representatives of the various federal agencies engaged in broadcasting, was established to coordinate Federal Government broadcasting so as to minimize interference and make more effective use of shared time. To this end, frequencies within the Federal Government allocation were assigned through a procedure of cooperation and agreement by the users. Institutionalization of this procedure was achieved in IRAC's adoption of a statement of policy on May 8, 1925,²¹ many of the statements of which appear as applicable today as when written.

Although the "cooperative procedure for assigning radio frequencies to [Federal] Government stations was proceeding smoothly, the licensing of non-Government [civilian] stations became a more serious problem as time went on. . . ."²² In the private area, the Secretary of Commerce sought to ameliorate the interference problem by utilizing his licensing powers under the 1912 Act. In this regard, the Secretary had called conferences of the various radio interests in Washington in February, 1922, and March, 1923,²³ in which it was agreed by the participants that the Secretary should have the authority to assign frequencies, to divide time and to limit power of the transmitters. As noted above, this authority was not specifically granted in the 1912 Act. Senator White introduced a radio bill in the Senate which would have accorded the authority to assign frequencies, but it failed to receive Congressional approbation in

20. MACQUIVEY, note 13, at 61.

21. Statement of Government Domestic Radio Policy, Adopted by the Interdepartment Radio Advisory Committee (mimeo 28485 of IRAC, May 8, 1925).

22. MACQUIVEY, note 13 at 63-64.

23. See HERRING & GROSS, note 17 at 242.

1922.²⁴ As the situation became more serious, radio conferences were again called in October, 1924, and in the autumn of 1925. At the latter conference, it was recommended that no new licenses be issued.²⁵

In the face of such necessity, the Secretary sought to utilize the licensing power as a vehicle for frequency assignment. That such use was authorized under the Act was, to say the least, questionable. An opinion of the Attorney General in 1912 had stated:

The language of the act, the nature of the subject-matter regulated, as well as the general scope of the statute, negative the idea that Congress intended to repose any such discretion in you [the Secretary] in the matter of licenses. It is apparent from the act as a whole that Congress determined thereby to put the subject of radio communication under Federal supervision so far as it was interstate or foreign in its nature. It is also apparent therefrom that the supervision and control is taken by Congress upon itself, and that the Secretary of Commerce and Labor is only authorized to deal with the matter as provided in the act and is given no general regulative power in respect thereto. The act prescribes the conditions under which the licenses shall operate, containing a set of regulations, with penalties for their violation.²⁶

On the other hand, a decision of the Court of Appeals of the District of Columbia in 1923, in the *Intercity* case,²⁷ concluded that the Secretary did possess such power. This set the stage for *United States v. Zenith Radio Corporation*²⁸ in 1926. Zenith in its license had been assigned a specific wave length with hours of operation limited from 10 to 12 p.m. on Thursday night and then only "when the use of this period is not desired by the General Electric Company's Denver station." The government brought criminal proceedings under section 1 of the Radio Act of 1912 since Zenith admitted that it had operated at a frequency and during hours not permitted in the license. The court, in finding for the defendants, held that the Secretary of Commerce had no authority under the Act to deny a license to a qualified applicant or even to apply restrictions as to hours or frequencies to be used.

The conflict between *Intercity* and *Zenith* became the occasion of another request by the Secretary to the Attorney General for a definition of his powers under the 1912 Act. The opinion of the Attorney General

24. See MacQUIVEX, note 13 at 62.

25. *Id.* at 63.

26. 29 Op. A.G. 579 (1912).

27. *Hoover v. Intercity Radio Co., Inc.*, 286 F.2d 1003 (D.C. Cir. 1923).

28. *United States v. Zenith Radio Corp.*, 12 F.2d 614 (D.C. Ill. 1926). See also *Carmichael v. Anderson*, 14 F.2d 166 (D.C.W.D. Mo. 1926).

concluded that while a station could not operate without a license, the Secretary had no discretion to refuse a license upon proper application. It further concluded that no power was conferred by the Act to designate the frequency within the broadcast band at which a station might operate, and that the Secretary might fix the normal wave length but the station was free to select other frequencies for operation.²⁹

As a result of this opinion, the Secretary ceased assigning wave lengths, his office merely registering the frequencies designated by applicants who were free to use whatever frequency they chose.³⁰ With the Secretary exercising merely a registration or ministerial function, the 1912 Act "broke down." As observed by one authority:

During the period from July, 1926 to Feb. 23, 1927, when Congress enacted a new law to regulate radio communication, nearly 200 new broadcasting stations came into existence bringing the total up to 733. The new stations selected whatever frequencies they chose and operated them with any desired power regardless of the interference that they happened to create for existing American or Canadian Stations. Existing stations that were dissatisfied with their assignments jumped to other frequencies and increased power and hours of operation at will. The result was a chaos in broadcasting which has properly been termed a "breakdown of the law."³¹

And, by another:

It is not, therefore, entirely accurate to say that the 1912 law broke 'down.' It had merely been prepared on a theory of licensing which was inconsistent with all the developments of the art. The developments require a selection in certain classes from among the applicants for radio licenses because there is not room for all. The Act of 1912 contemplated only that state of the communication technique which prevailed in the mobile, amateur, and experimental frequencies where the nature of the activity was such that all who desired might be licensed.³²

Whichever of the above analyses is accepted, it is clear that increased demands upon a limited natural resource had made the 1912 Act obsolete. Assignment of frequencies within the civilian sphere had become imperative if the chaos of increasing interference was to be checked. Bills to amend the 1912 Act, beginning in 1915, and spurred by the radio conferences of the 1920's, thus were introduced into the Congress with increasing frequency.³³

29. 35 Op. A.G. 126 (1926).

30. MACQUIVEY, note 13 at 64.

31. HERRING & GROSS, note 17 at 244.

32. DAVIS, note 10 at 45, 54.

33. For an analysis of these bills, see WARNER, note 14 at 766-776.

B. 1927-1933

Finally, as a result of President Coolidge's plea for legislative action in his message of December 7, 1926,³⁴ a stop-gap measure was passed in the form of a joint resolution limiting licenses to a 90-day period. The licenses were not to be renewed unless the applicant would state in writing "a waiver of any right or any claim to any right, as against the United States, to any wave length or to the use of the other in radio transmission because of a previous license to use the same or because of the use thereof."³⁵

This temporary Act was succeeded, on February 23, 1927, by the Radio Act of 1927.³⁶ Section 3 of the 1927 Act created the Federal Radio Commission (the forebear of the Federal Communications Commission), and (in section 4) conferred upon it the power to classify stations; assign frequencies; determine the amount of power, the time of station operation, and location of stations; prescribe areas or zones to be served by any station; regulate the external effects of apparatus used; and "make such regulations not inconsistent with law as it may deem necessary to prevent interference between stations and to carry out the provisions of this Act." The Commission was to perform those functions when the "public convenience, interest, or necessity requires."

Thus, the Radio Act of 1927 "was a traffic-control measure designed primarily to prevent interference between stations in order that the public receive adequate broadcast service."³⁷ Congress did not, however, spell out how the Commission was to implement this policy, other than through application of the general standard of "public convenience, interest, or necessity." Through the provisions of section 4, however, and the *discretionary* licensing powers of sections 3, and 9-14, statutory authority had been created by which some order might be brought to civilian broadcasting. This was the area in which the 1912 Act had been deficient, and this was the deficiency which the 1927 Act sought to rectify.

Significantly, the 1927 Act accorded licensing and assignment functions to the Commission only with regard to non-Federal Government [civilian] users. Section 6 is noteworthy in this regard, particularly in view of the fact that it constitutes the basis of sections 305 and 606 of the present (1934) legislation. The section reads:

Radio stations belonging to and operated by the United States shall not be subject to the provisions of Sections 1, 4, and 5 of this Act. All such [Federal] government stations shall use such frequencies or wave lengths as shall be assigned to each or to

34. *Id.* at 775-76, n.63.

35. 44 STAT. 917.

36. 44 STAT. 1162-74.

37. WARNER, note 14 at 777.

each class by the President. All such stations, except stations on board naval and other government vessels while at sea or beyond the limits of the continental United States, when transmitting any radio communication or signal other than a communication or signal relating to government business shall conform to such rules and regulations designed to prevent interference with other radio stations and the rights of others as the licensing authority may prescribe. Upon proclamation by the President that there exists war or a threat of war or a state of public peril or disaster or other national emergency, or in order to preserve the neutrality of the United States, the President may suspend or amend, for such time as he may see fit, the rules and regulations applicable to any or all stations within the jurisdiction of the United States as prescribed by the licensing authority, and may cause the closing of any station for radio communication and the removal therefrom of its apparatus and equipment, or he may authorize the use or control of any such station and/or its apparatus and equipment by any department of the government under such regulations as he may prescribe, upon just compensation to the owners. Radio stations on board vessels of the United States Shipping Board or the United States Shipping Board Emergency Fleet Corporation or the Inland and Coastwise Waterways Service shall be subject to the provisions of this Act.³⁸

It should be recalled that IRAC had now been in existence for some five years. It had been considering frequency allocation problems within the Federal Government sphere since two months after its creation, and by now had fairly well institutionalized its procedures for assignment.³⁹ It was little wonder, then, that the President, who had neither the time nor the expertise personally to effectuate section 6 of the 1927 Act, should have made use of this body. Accordingly, on March 29, 1927, President Coolidge wrote to the Secretary of Commerce stating that, concerning the performance of his duties under section 6 (involving the assignment of frequencies to Federal Government stations and the avoidance of conflicts between various Federal Government services), he wished to have applications from Federal Government agencies for use of frequencies submitted to IRAC, which should make recommendations advising him in such matters.⁴⁰

The 1927 Act, however, did not cure the allocation problem in the civilian sphere overnight. To begin with, the Act had provided that the

38. For a discussion of this provision see 67 Cong. Rec. 5480, 5583, 12357, 12505, 12616; and 68 Cong. Rec. 2563, 2578, 2589, 2876, 2877, 3121, 4153.

39. Hearings, note 2 at 130-31.

40. *Id.* at 130.

Commission was to be appointed on a year-to-year basis.⁴¹ To make matters worse, Congress failed to pass the deficiency appropriation bill of 1927 with the result that the Commission had no staff to assist it in administering the Act, and the Senate confirmed only three of the commissioners that year. At the end of the first year, four members functioned as the Commission, only one of whom had been confirmed. This lack of personnel and appropriations thus precluded the Commission from accomplishing anything in the first year, other than eliminating the worst cases of radio interference.⁴² Professor Cushman's conclusion is inescapable: the Commission "got off to a bad start."⁴³

In 1928, the Act was supplemented by the so-called Davis Amendment.⁴⁴ Among the provisions of the 1927 Act had been the authority to establish areas or zones to be served by any station. No provision had been made, however, for the equalization of broadcasting service. The Amendment sought to rectify this deficiency by requiring an equality of radio facilities among geographical zones according to population and among states within each zone according to population.⁴⁵ Accordingly, the Commission in 1928 promulgated and put into effect a tripartite allocation plan which provided for local, regional and clear channel stations. The Amendment was implemented by a quota system wherein zones and states received quotas or percentages of broadcast facilities based upon population.⁴⁶

Difficult problems of interpretation, however, beset the attempt to apply the Davis Amendment in particular situations. The inevitable litigation which followed culminated in *Federal Radio Commission v. Nelson Bros. Co.*,⁴⁷ wherein the Supreme Court upheld the right of Congress under the commerce clause to regulate radio communication, thus upholding the constitutionality of the Radio Act of 1927, and of the Davis Amendment. In addition, the Court commented on the interpretation of the phrase "public interest, convenience or necessity," indicating that it "is to be interpreted by its context, by the nature of radio transmission and reception, by the scope, character and quality of services, and, where an equitable adjustment between States is in view, by the relative advantages in Service which will be enjoyed by the public through the distribution of facilities."⁴⁸ The case is particularly significant in that

41. This was changed in the 1929 Act, which provided that the powers and duties vested in the Commission should continue "until otherwise provided by law."

42. See First Annual Report of the Radio Commission 1-2 (1927).

43. CUSHMAN, *THE INDEPENDENT REGULATORY COMMISSIONS* 311 (1941).

44. 45 STAT. 373. The Davis Amendment was repealed by Act of Congress, June 5, 1936.

45. See WARNER, note 14 at 780, n.78.

46. See Second Annual Report of the Radio Commission 17 (1928).

47. 62 Fed. 854 (D.C. Cir.), *rev'd*, 289 U.S. 266 (1933).

48. 289 U.S. at 285.

the language of the 1927 Act, which was upheld against constitutional attack, is the language which appears in the present (1934) legislation.

It is noteworthy that although the Act accorded broad discretion to the Commission in allocation management in the civilian sphere, *i.e.*, through the "public interest, convenience or necessity" standard, the Commission at a very early date began to develop principles and rules upon the basis of which assignment decisions would be made. To some extent, then, these decisions were in a range of predictability. These principles have been summarized as follows:

One of the basic principles was that there should be established the best possible reception conditions throughout the entire country. A second principle was that the interests of the listening public are superior to those of the broadcasters. A third general principle was that the standard of public interest, convenience and necessity must be applied as a comparative rather than as an absolute standard. In the case of two applicants for a frequency, it is incumbent upon the Commission to choose the best of the two, not necessarily to compare them against an absolute standard, although the Commission has certain minimum standards that broadcasters must meet.⁴⁹

These basic principles were formalized in the promulgation of a set of rules, which resulted from hearings held by the Commission in 1928.⁵⁰ These rules contain many of the basic concepts of radio-frequency management in the civilian sphere employed in the present rules of the Federal Communications Commission.

C. *The 1934 Act*

Radio communication, however, was growing rapidly. Rapid growth brought new problems and the latter brought new bills and proposed amendments to the 1927 Act.⁵¹ Finally, in 1933, President Roosevelt requested the Secretary of Commerce to establish an interdepartmental committee to undertake a thorough study of the whole problem of the regulation of communications. The committee's report, submitted on January 23, 1934, identified the crucial problem as one of coordination of the various communication control bodies and suggested a single agency as a solution. The President sent the committee report to Congress accompanied by the following message:

I have long felt that for the sake of clarity and effectiveness, the relationship of the Federal Government to certain services known as utilities should be divided into three fields:

49. MACQUIVEY, note 13 at 68-69.

50. See Engineering Memorandum of May 14, 1928, cited in MACQUIVEY, note 13 at 69.

51. See WARNER, note 14 at 783-88, for the history of these bills.

Transportation, power, and communications. The problems of transportation are vested in the Interstate Commerce Commission, and the problems of power, its development, transmission, and distribution, in the Federal Power Commission.

In the field of communications, however, there is today no single Government agency charged with broad authority.

The Congress has vested certain authority over certain forms of communications in the Interstate Commerce Commission, and there is in addition the agency known as the Federal Radio Commission.

I recommend that the Congress create a new agency to be known as the Federal Communications Commission, such agency to be vested with the authority now lying in the Federal Radio Commission and with such authority over communications as now lies with the Interstate Commerce Commission—the services affected to be all of those which rely on wires, cables, or radio as a medium of transmission.

It is my thought that a new commission such as I suggest might well be organized this year by transferring the present authority for the control of communications of the Radio Commission and the Interstate Commerce Commission. The new body should, in addition, be given full power to investigate and study the business of existing companies and make recommendations to the Congress for additional legislation at the next session.⁵²

The result was the Communications Act of 1934,⁵³ providing for unified control of all civilian communications facilities in a single body. It thus abolished the Federal Radio Commission and transferred all of its duties, powers and functions under the Radio Act of 1927 to a new seven member commission, the Federal Communications Commission. Many new provisions appear in the 1934 Act, particularly those dealing with the procedures and methods of regulating utility companies. However, with respect to the assignment and control of frequencies, the substance of the 1927 legislation was re-enacted.⁵⁴ Thus, the relevant sections of the 1927 Act, *i.e.*, sections 4, 5 and 6, have become, with minor additions and alterations, sections 301, 303, 305 and 606 of the 1934 Act.

Sections 301 and 303, in re-enacting sections 4 and 5 of the 1927 Act, afford the basis of FCC licensing and assignment procedures with respect

52. S. Doc. 144, 73d Cong., 2d Sess. (1934).

53. 48 STAT. 1064.

54. H.R. No. 1918, 73 Cong., 2d Sess. 47 (1934).

to civilian users.⁵⁵ Sections 305 and 606 are addressed to Federal Government stations. Section 305 exempts [Federal] Government stations from the applicability of sections 301 and 303, and confers upon the President the responsibility for assignment within this sphere (the first part of old section 6). Section 606 relates to the emergency and war powers of the President over telecommunications (the second part of old section 6, dating back to the Act of 1912).

As a practical matter, of course, President Roosevelt was no more equipped personally to administer section 305 than President Coolidge had been to administer section 6 of the 1927 Act. Thus, IRAC continued, under the new law, to handle frequency assignment problems of Federal Government users.⁵⁶ The only change made by President Roosevelt in this period is reflected in his letter to the Chairman of the FCC, of November 9, 1935, suggesting that IRAC continue to function as a clearing house in the detailed allocation of specific frequencies, but that its reports and draft Executive Orders be submitted through the Chairman of the FCC.⁵⁷

D. *The War Years*

On September 20, 1940, the President, by Executive Order 8546, created the Defense Communications Board (DCB) to coordinate the relationship of all branches of communication to national defense.⁵⁸ By Executive Order 9183 of January 15, 1942, the name was changed to the Board of War Communications (BWC), but the functions and operations remained fundamentally the same. The Board was composed of the Chairman of the FCC, the Chief Signal Officer of the Army, the Director of Naval Communications, the Assistant Secretary of State in charge of the Division of International Communications, and the Assistant Secretary of the Treasury in charge of the Coast Guard.⁵⁹

The concern of the Board was with national defense. The President's authority under section 606 was delegated to the Board. Pursuant thereto, the Board conducted studies of available communications facilities and controlled their reallocation in accordance with the needs of defense and of the war. The Board did not, however, concern itself with standards of frequency assignment or administrative problems of reallocating frequencies as such, either within the Federal Government or civilian

55. These procedures will be considered in detail in Part II of this study.

56. MACQUIVEY, note 13 at 72.

57. Hearings, note 2 at 131.

58. *Ibid.*

59. The Board functioned through seventeen committees, the membership of which included representatives of all the communications industry and of the agencies of the Federal Government concerned with communications. State and Municipal government representatives were also included, as was IRAC once the War had commenced. See MACQUIVEY, note 13 at 72-73.

spheres, or between them. Those problems continued to be handled by IRAC and the FCC.⁶⁰

World War II, as had World War I before it, brought increasing problems of frequency saturation and of organizational coordination. The problems now were intensified, however, as technological development had inundated available spectrum space. Congressional investigations and various studies were a response to this pressure. The select committee created by Resolution 21, 78th Congress, to investigate the FCC was an example. In those hearings in 1943, FCC Commissioner Craven recommended that (1) Congress "clarify" jurisdiction over the radio spectrum, (2) in the process "legalize" IRAC, and (3) that the President adjudicate FCC/IRAC differences, taking into account the advice of an advisory board. The Committee Chairman was of the view, however, that Congress could not make the President accept advice, and Senator White believed that the military services would not accept unified control over the radio spectrum, even to the extent recommended by Commissioner Craven.⁶¹

In these 1943 hearings there were contained the kernels of much of the controversy respecting spectrum allocation which has continued down to date. How were defense and non-defense communication needs to be harmonized in regard to a limited resource, *i.e.*, the radio spectrum, where there was no institutionalized coordination of assignments of various parts of that resource? That conflicts between the FCC and IRAC in this regard were beginning to constitute a problem is apparent from these hearings.

Both IRAC and the FCC were planning for post-war frequency allocation problems. The FCC Hearings in Docket 6651, ordered August 15, 1944, are illustrative. As a result of this hearing, new FCC tables were issued on May 25 and June 27, 1945. An IRAC report, which included an exhaustive study of technical advances in electronic equipment and techniques in World War II, submitted to the Department of State in June of 1944, and altered to incorporate the findings of Docket 6651, June 27, 1945, became the basis for the U.S. position at the Atlantic City Radio Conference of 1947.⁶²

60. *Id.* at 73.

61. Hearings, note 2 at 131.

62. *Ibid.* Mention may be made of the special committee on communication, set up on June 21, 1943, to undertake planning with respect to the problems of transfer from war to peace. The committee was created by the Secretary of State, and included representatives from all the principal agencies concerned with communications. Members of Congress were also invited to participate in its deliberations. Though primarily concerned with international agreements, operating arrangements, restraints of trade, *etc.*, the technical subcommittee did undertake some studies with respect to changing the allocation table of radio frequencies in the Cairo Radio Regulations of 1938. Particularly troublesome in this regard was the problem of considering and attempting to reconcile the conflicting views of the

E. *The Post-War Period*

On March 14, 1946, the Telecommunications Coordinating Committee (TCC) was organized under the sponsorship of the Department of State by voluntary agreement of State, Treasury, War, Navy, Commerce, and the FCC; later the Air Force was added.⁶³ "This agency was established in the expectation that it could develop plans and programs and formulate policies to promote the most effective use of wire and radio facilities."⁶⁴ The objectives to be pursued by TCC were defined as follows:

... The coordination of policies of the various departments and agencies of the United States Government relating to domestic and international communications matters in order to encourage the most efficient system for international communication by wire and radio; promote the national defense and security; develop the most effective use of wire and radio facilities as an instrument for the expansion of foreign trade; provide the most efficient and economical system for handling wire and radio communications of the various departments and agencies of the United States Government; and advise on problems of an international nature including preparation for international telecommunications conferences. The Committee shall act in an advisory capacity only, but may take final action when specifically authorized by unanimous concurrence of all government agencies represented by the membership. The Committee shall maintain close liaison with the Cryptographic Security Board, the Air Coordinating Committee and the United States Central Intelligence Agency. In accordance with the foregoing, the primary objective of this Committee is the formulation of a national communications policy.⁶⁵

Problems in achieving the desired coordination between civilian and Federal Government use and between the agencies within the Federal Government sphere, however, beset TCC from the outset. The FCC pointed to its own statutory responsibilities for policy formulation and advice to Congress. The state reiterated its initial view that the TCC could work only by unanimity and that there must be no intrusions on responsibilities of individual agencies. The result was inevitable: "As a result, although it has a long history of trying to establish itself as a mechanism for the formulation of national policy, it has proved to be

Civil Aeronautics Administration and others concerning the amount of spectrum space to be allocated for aeronautical radio. The Committee was replaced after the war by the Telecommunications Coordinating Committee (TCC). See *MACQUIVEY*, note 13 at 74-77.

63. Report, note 1 at 17.

64. *Ibid.*

65. Memorandum from Mr. Offerman, State Department, to Mrs. Hesse, Department of Commerce, April 9, 1946, cited in *MACQUIVEY*, note 13 at 78-79.

ineffectual and today is advisory only to State."⁶⁶ TCC, however, at least, considered and dealt with a number of important subjects, and may even have contributed in some measure to progress toward their solution.⁶⁷

The year 1946 was significant, also, for the Seidman and Moore study,⁶⁸ under the auspices of the Bureau of the Budget. The study was designed to determine the organization required to carry out the President's responsibility for assigning radio frequencies to Federal Government stations. It recommended an Executive Order establishing an office of the Coordinator of Government Radio in the Executive Office of the President. What was essentially contemplated was the result achieved by Executive Order 10460, discussed hereafter.⁶⁹

Finally, 1946 saw passage of the Administrative Procedure Act, approved on June 11 of that year.⁷⁰ Its significance to allocation problems is that in its application to the FCC, the creation of tables (rule-making) and licensing of particular users (adjudication) are subject to a set of standardized legal rules. Thus, in the civilian sphere, spectrum allocation and the assignment of frequencies follow defined procedures including

66. Hearings, note 2 at 132.

67. These accomplishments have been summarized as follows:

- The merger of international communications companies;
- Preparations for the Moscow Telecommunications Conference at Moscow, U.S.S.R. in 1946;
- Standardization of radio aids to navigation, particularly air navigation;
- Use of radio by the United Nations at its headquarters in New York and the problem of coordinating the use of radio frequencies for that operation;
- The use of submarine cables, particularly those which had been involved in war activities;
- Establishment of overseas relay points for radio circuits, such as those in the Philippines and in the Tangier International Zone;
- The establishment of direct circuits between the United States and certain foreign countries;

Liaison with other intra-Government and Government-Industry committees, such as the Radio Technical Commission for Aeronautics, Radio Technical Commission for Marine Services, the IRAC, the National Security Council and the Joint Aviation-Telecommunications Coordinating Committee. See MACQUIVEY, note 13 at 79-80.

68. SEIDMAN & MOORE, BUDGET BUREAU STUDY (1946).

69. The report emphasized some basic points, two of which were:

- (1) The FCC operates as a defender of non-Government [civilian] interest in working with the IRAC. If charged with making all frequency assignments it would be subject to much greater political pressure and to accusations from both sides. In turn, its regulation of private radio would be made difficult.
- (2) It has been proved amply that executive agencies will not allow a co-equal agency to control their internal operations. It stated . . . on a proposal to create a Department of Communications . . . the regulation of one department by another generally has been quite unsuccessful. Quoted in Hearings, note 2 at 132.

70. 60 STAT. 237.

notice, the opportunity to participate, public hearings, *etc.*⁷¹ Notably, the Act makes certain exceptions, *e.g.*, "except to the extent that there is involved (1) any military, naval, or foreign affairs function of the United States. . . ."⁷² The significance of this exception to the separate treatment of civilian and Federal Government users is manifest. In effect, the situation concerning Federal Government use of the spectrum established prior to, and confirmed in one 1934 Act, was continued unchanged in the 1946 Administrative Procedure Act.

On February 24, 1947, Executive Order 9831 abolished the Board of War Communications.

Between January 15, 1948 and February 28, 1950, the Provisional Frequency Board (PFB) of the International Telecommunications Union met at Geneva to draft a frequency list for all frequency uses between 4 and 27.5 megacycles. "It failed because the demand for frequencies far exceeded the supply and countries, including the United States, could not or would not reduce their demands."⁷³

On February 3, 1949, Senator Johnson of Colorado introduced Senate Resolution 50, 81st Congress, which as adopted directed the Senate Committee on Interstate and Foreign Commerce, to investigate communications problems. The investigation was to include, *inter alia*, the following:

- (a) the problems relating to U.S. common carriers in domestic and international operations, including relationship of problems to national security; (b) the problems presented by requirements of international treaties and conventions re necessary revisions of Communications Act; (c) the problems arising from the unprecedented demands for frequencies for non-Government [civilian] users; and policies which Congress should adopt for the granting of such allocations.⁷⁴

The FCC, IRAC, and the various federal agencies involved in radio broadcasting all submitted reports on their respective radio frequency usage and wire operations during the course of this investigation. Senator Johnson, subsequently (April 24, 1951) introduced a bill, S. 1378, to assign to the FCC the function of allocating frequencies to Federal Government as well as to civilian stations. The bill failed of enactment and, in consequence, the 1949 Senate activity in the allocation area produced no results.

Technological advances and the increasing defense requisites occa-

71. Administrative Procedure Act, §§ 4, 5, 7, 8, 10.

72. *Id.* at 34.

73. Hearings, note 2 at 132.

74. *Id.* at 132-33.

sioned by the Korean War heightened the competition for available spectrum space. In fact, even before the outbreak of hostilities, the need for cooperation or coordination between Federal Government and civilian allocation was evidenced in H. R. 6949, introduced on January 24, 1950, by Representative Sadowski. The bill proposed the creation of an independent agency within the executive branch, to be called the Frequency Control Board. The five-man Board was to formulate plans and policies for spectrum allocation, assign frequencies to Federal Government stations and prescribe regulations for FCC assignment to civilian users. It would also possess the powers to disapprove FCC spectrum assignments which would interfere with proper Federal government uses. A military liaison committee was to advise the Board, and by virtue of right of appeal to the President through the Secretary of Defense, the committee, in matters of national defense, was to possess a virtual veto power over the Board. Strong opposition, both within and without government, killed the bill.⁷⁵

The failure of the Provisional Frequency Board of the ITU, however, to develop an agreed engineering plan for international frequency assignments,⁷⁶ alluded to earlier, and the increasing competition between Federal Government and civilian users for high frequencies domestically,⁷⁷ prompted the FCC, in a letter dated May 20, 1949, to request that the Department of State give consideration to the establishment of some mechanisms for making policy decisions on the use of radio frequencies by Federal Government agencies.⁷⁸ The Department, on July 28, 1949, submitted a letter to President Truman suggesting that a commission be set up to this end. The President agreed, and by Executive Order 10110,⁷⁹ dated February 17, 1950, established the President's Communications Policy Board (PCPB).

F. *The President's Communications Policy Board*

The objectives of the Board were revealed in the following excerpt from the President's letter to the Board's Chairman, Dr. Irving Stewart:

Developments in this field during and since the war have created a number of problems which require careful consideration at this time. The extent to which the Government should, in time of peace, continue to operate its own communications facilities is one such problem of current importance. The question of merging the overseas operations of our commercial communications companies also requires objective review. The most

75. *Id.* at 133.

76. See MACQUIVEY, note 13 at 82.

77. Report, note 1 at 77.

78. MACQUIVEY, note 13 at 82.

79. 15 F.R. 909.

pressing communications problem at this particular time, however, is the scarcity of radio frequencies in relation to the steadily growing demand. Increasing difficulty is being experienced in meeting the demand for frequencies domestically, and even greater difficulty is encountered internationally in attempting to agree upon the allocation of available frequencies among the nations of the world. In the face of this growing shortage, the problem of assuring an equitable distribution of the available supply of frequencies among all claimants, both governmental [Federal] and private [civilian], is rapidly assuming major prominence.⁸⁰

The Executive Order setting up the PCPB directed that body to study the present and potential use of frequency space by both Federal Government and civilian users and to make recommendations to the President with respect to the "most effective use of radio frequencies by [Federal] governmental and non-governmental [civilian] users and alternative administrative arrangements in the Federal Government for the sound effectuation of such policies. . . ."⁸¹

After 59 sessions and a year of work, the Board, on February 16, 1951, submitted its 238 page report. Five issues were identified for study, the most significant of which for present purposes was the first. This involved the question of how the United States should formulate "policies and plans for guidance in reconciling the conflicting interests and needs of [Federal] Government and private [civilian] users of spectrum space—that is, for guidance in making the best use of its share of the total spectrum."⁸²

Parenthetically it should be noted that during the course of its study, the Board considered and rejected two proposed solutions to the allocation problem: "(a) the establishment of a superboard to allocate the spectrum space to the FCC and to [Federal] Government agencies, and (b) the assignment to the FCC of responsibility for the allocation of frequencies to [Federal] Government agencies—the latter was concurred in by the FCC."⁸³ Rejection of the latter proposal, however, did not dissuade Senator Johnson from introducing Bill S. 1378, on April 24, 1951, to amend section 305(a) of the 1934 Act to provide for FCC assignment of frequencies to Federal Government stations. As noted earlier, the bill failed to pass.⁸⁴

80. President's Communications Policy Board, *Telecommunications, A Program for Progress 1* (1951).

81. 15 F.R. 909.

82. Hearings, note 2 at 133.

83. *Id.* at 134.

84. Note 95, and accompanying text.

Two conclusions of the Board are pertinent:

(1) As to the pressures on the radio spectrum: "The resolution of these problems can be secured only through adequate, energetic management, which demands that the Government organize itself to take a comprehensive view of the telecommunication field."

(2) As to Government organization: "Fundamental changes in telecommunications requires overhaul of Government machinery for formulating telecommunications policy and for administering certain telecommunications activities in the national interest"; and "The whole Government telecommunications structure is an uncoordinated one and will be even less adequate in the future than it has been in the past to meet the ever-growing complexities of telecommunications. A new agency is needed to give coherence to the structure."⁸⁵

The Board made five recommendations,⁸⁶ principal among which was the creation of a Telecommunications Advisory Board to advise and assist the President in carrying out his responsibilities in telecommunications. In addition to planning and guidance functions generally, the

85. Hearings, note 2 at 134.

86. These were [Hearings, note 2 at 134]:

(1) There be established in the Executive Office of the President a three-man Telecommunications Advisory Board—or as a minimum a single telecommunications adviser to the President—to advise and assist the President in the execution of his responsibilities in telecommunication. This Board should carry out the planning and executive functions required by the President's powers to assign frequencies to [Federal] Government users, and to exercise control over the Nation's telecommunication facilities during a national emergency or war. It should stimulate and correlate the formulation of plans and policies to insure maximum contribution of telecommunication to the national interest, and maximum effectiveness of U.S. participation in international negotiations. The Board should recommend necessary legislation to the President, and advise him on legislation. The Board should stimulate research on problems in telecommunication. It should establish and monitor a system of initial justification and continued use of frequencies by [Federal] Government agencies, and, in cooperation with the FCC, supervise the division of spectrum space between [Federal] Government and non-Government [civilian] users.

(2) The FCC should be strengthened in funds and organizational structure so that it can better carry out its duties, and can participate more fully in government wide formulation of policy.

(3) Appropriate units within the Department of State should be strengthened for better performance of functions in telecommunication.

(4) Other Government agencies should strengthen their machinery for formulating telecommunication policy, and for relating that policy to the other policies and programs served by telecommunications.

(5) The Government should step up its program for conducting and stimulating research in telecommunication, especially in those fields bearing on propagation and frequency utilization.

Board was to establish and monitor a system of initial justification and continued use of frequencies by Federal Government agencies, and, in cooperation with the FCC, supervise the division of spectrum space between Federal Government and civilian users.

More significant for present purposes than its conclusions and recommendations, however, was the Board's consideration of the management requisites of so important, yet limited, a natural resource. As the Board stated:

In the exploitation of a limited entity such as the radio spectrum, it is essential that as the pressure for radio channels increases there must be established alert telecommunications management to assure equitable allocation of these channels. Further, it is essential that this management assure, insofar as is economically practicable, the use of the technical improvements in equipment and operating techniques for increasing the intelligence transmitted per kilocycle of spectrum space.⁸⁷

The objective having been stated, the Board turned to the question posed thereby, *i.e.*, the effectiveness of government management in allocating frequencies and supervising spectrum usage. In this connection, the Board was highly critical of the bifurcated organizational structures in the 1934 Act, the Act having been written before demand for spectrum space had become acute, and "passed at a time when there was far less conflict than there is now between the requirements of the government and the requirements of other claimants for radio frequencies."⁸⁸ Whereas the Act had reposed in the FCC responsibility for all civilian communications, section 305 had given the President the power to assign frequencies to government stations and had exempted the latter from the licensing and regulatory powers of the FCC, and section 606 had authorized the President to assume control of all telecommunications in times of war and emergency. Moreover, though elaborate procedures and standards for assignment had been worked out by statute and rule respecting FCC management of civilian usage, no standards were established at all for assignment to Federal Government users.

In addition, "the Act places the Commission under no duty to respect the President's assignment; either the Commission or the President could start a radio war by assigning a frequency already in use to an interfering user."⁸⁹ The absence of such war was attributed to FCC subservience to IRAC decisions. The significance of this is that "allocations were made by officials who could not weigh all demands for spec-

87. President's Communications Policy Board, note 80 at 9.

88. *Id.* at 194.

89. *Id.* at 193-94.

trum space, [federal] government and private [civilian], and judge them impartially on the basis of full explanation according to a single set of standards and well-considered policy."⁹⁰

The Board was especially critical of IRAC: "The key to the matter is the nature of the group—a group of users, rather than an independent judging body. . . . [N]o body of users acting as a judge of its own requirements can take an impartial view of the requests of its members."⁹¹ Not just its composition, but its procedures, as well, were criticized: "IRAC does not require sufficient justification for the assignment of frequencies, has no authority to question any [federal] government department's statement of need for a frequency, and is not constituted to do so."⁹² A third criticism involved the fact that there were no provisions for the transfer of frequencies when the original assignees failed to utilize them. Finally, the Board criticized the absence of any coherent policy of spectrum allocation for the future. The Board stated:

[T]here has been no long-range study of the question, no long-range planning. No agency of government is in a position to take a comprehensive view of this problem. No agency is qualified to advise the President in fields where the interests of private [civilian] and [Federal] government telecommunications users are in conflict. Meanwhile in the absence of guiding policy, the action of government agencies could seriously handicap the industry.⁹³

On the basis of the above, the Board's conclusions appear inescapable. Thus:

[D]ual control [by IRAC and FCC] has led to friction, misunderstanding, waste, and avoidance of responsibility. The organization is lacking in over-all policy guidance, and is so complex that few persons understand all its ramifications. . . .

The present telecommunications legislation and organization have failed to produce adequate direction, leadership, administration, and control and have fostered dissension between the federal government and industry. Many of these shortcomings could have been mitigated if not avoided. . . .

Exploitation of the spectrum is not static but is fluid, increasing with the cooperation and good will of users, improvements in equipment, operating techniques, circuit discipline, need, and willingness to accept a poorer grade of service when necessary.

90. *Id.* at 204.

91. *Id.* at 200.

92. *Id.* at 30.

93. *Id.* at 11.

It is not likely that the improvements derived from these measures will keep pace with the demands unless energetic steps are taken to establish an agency competent to assure the best circuit discipline, equitable allocation of frequency channels, and full use of technical developments. . . .⁹⁴

G. *The Early 1950's*

The President did not accept the Board's recommendation for establishing a Telecommunications Advisory Board, but instead, issued, on October 9, 1951, Executive Order 10297.⁹⁵ Pursuant thereto a single Telecommunications Advisor to the President (TAP) was appointed to assist and advise the President with respect to his telecommunications functions and to direct the activities of IRAC. Although possessing a very small staff, Mr. Hardin Pratt, who was appointed to the job, was quite active during the short life of TAP. Committees were formed consisting of representatives of Federal Government agencies concerned with broadcasting. The principal committees were the Technical Policy Steering Committee and an Executive Coordinating Committee. On October 6, 1952, the TAP reorganized the committee structure so as to combine the Executive Coordinating Committee and the IRAC into a new committee which, though retaining the name IRAC, was to concern itself primarily with policy matters relating to frequency usage. The FCC withdrew as a regular member and, in lieu thereof, designated a liaison representative to enable the commission to work jointly with the IRAC in solution of mutual problems. A Frequency Assignment Subcommittee (FAS) was established to take over the frequency assignment functions of the old IRAC. Finally, the Telecommunications Planning Committee (TPC) was set up on May 12, 1952, to deal with mobilization problems.⁹⁶ It was composed of the senior communications officials of the government.

On December 10, 1951, the President, pursuant to section 606(c) of the 1934 Act, issued Executive Order 10312, providing for emergency control over certain Federal Government and civilian stations (CONELRAD). Responsibility for review of and concurrence in communications plans was assigned to the Secretary of Defense and the Chairman of the National Security Resources Board (later changed to Director, Office of Defense Mobilization, and still later, July 1, 1958, to Director of Office of Civil and Defense Mobilization).⁹⁷

Organizational changes occurred soon after the new administration came to power. Thus, the Office of Telecommunications Advisor was transferred to the Office of Defense Mobilization (ODM) by Executive

94. *Id.* at 46, 50.

95. 16 F.R. 10329.

96. MACQUIVEY, note 13 at 90-91.

97. Hearings, note 2 at 135.

Order 10460, June 16, 1953. The Telecommunications Advisor forthwith resigned because "President Eisenhower decided to make his office subordinate to another."⁹⁸ He was eventually replaced (November 15, 1953) by the appointment of an Assistant Director for Telecommunications in the ODM, to:

(a) coordinate the implementation of all actions in the field of telecommunication in the U.S. Government, and to report to the National Security Council periodically with respect to progress in the implementation of policies approved by the NSA in this area; and (b) take additional steps to improve the management and administration of the radio frequency spectrum, with particular reference to problems created by the divided responsibilities of the President and the FCC and by difficulties of international coordination.⁹⁹

ODM General Administrative Order IX-I, establishing the position of Assistant Director for Telecommunications with the responsibilities as enumerated in Executive Order 10460, was issued in pursuance of that directive. The order also directed that IRAC report through the Assistant Director. Specifically, the Assistant Director was given the following duties:

- (a) Coordinating the development of telecommunications policies and standards applying to the Executive branch of the government;
- (b) Developing high standards governing telecommunications management within the executive branch of the government;
- (c) Coordinating the development by several agencies of the executive branch of telecommunications plans and programs designed to assure maximum security to the United States in time of national emergency with a minimum interference to continuing non-governmental [civilian] requirements;
- (d) Assisting and advising the President with respect to the assignment of radio frequencies to [federal] government agencies under the provisions of section 305 of the Communications Act of 1954, as amended, and establishing policies and procedures governing such assignments and their continued use;
- (e) Developing U.S. government frequency requirements; and
- (f) Approving plans relating to the control of electromagnetic radiation (CONELRAD).¹⁰⁰

98. Report, note 1 at 78.

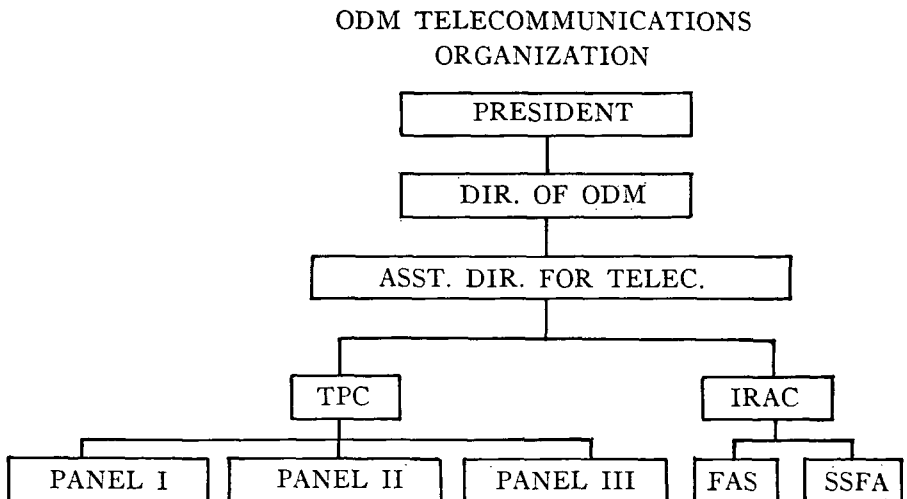
99. Hearings, note 2 at 136.

100. Note 80 at 18.

On September 23, 1953, Defense Mobilization Order IX-I reestablished the Telecommunications Planning Committee (TPC). The basic structure of the Committee was described by a member as follows:

The TPC is primarily concerned with policy formulation questions and is assisted in its operation by three panels. One is concerned with review of existing facilities, systems and methods and the preparation of inventories and plans for reallocation of telecommunications facilities in event of emergency. Another is concerned with new developments, new techniques and new methods and means of telecommunications. The third panel has been concerned with problems arising from the need to maintain vital communications despite all foreseeable measures to disrupt them.¹⁰¹

During this period, of course, IRAC was the body responsible for developing recommendations regarding frequency assignments to Federal Government radio stations. Such recommendations were reported to the Assistant Director for Telecommunications of the ODM. Draft executive orders for assignment of frequencies were submitted to the President through the ODM. Through the assistance of TPC Panel I, the ODM engaged in extensive planning functions related to emergency matters contemplated by section 606.¹⁰² The ODM Telecommunications structure at this time was as follows:¹⁰³



The reconstitution of IRAC, both in 1952 and again in 1953, discussed above, occasioned increased institutional activity in that body. On August

101. MACQUIVEY, note 13 at 92.

102. *Id.* at 93.

103. *Id.* at 97.

21, 1953, the new IRAC by-laws were approved. In August, 1953, the budget estimate for IRAC for fiscal 1954, included in the ODM budget request, gave IRAC a consolidated budget for the first time. On October 1, 1953, all IRAC records, property, funds and personnel were consolidated at ODM. Previously, they had been scattered between the Department of Commerce and the FCC.

Notably, however, the institutional changes brought about in telecommunications by Executive Order 10460, and what followed it, did not change the basic functioning of IRAC.¹⁰⁴ Though reporting to a different body, IRAC was still charged with formulating and recommending "policies, plans, and actions in connection with the management and usage of radio frequencies by the U.S. Government."¹⁰⁵

On November 5, 1953, IRAC established a set of principles for the assignment and use of radio frequencies by Federal Government agencies in order to attempt to assure that requests were justified and that assignments were used and not hoarded, and on July 1, 1954, IRAC adopted a monthly review and notification procedure respecting assignments no longer needed by Federal Government agencies.¹⁰⁶

There were, of course, additional Congressional and agency attempts during this period to meet the problems posed by the PCPB. For example, on August 3, 1953, Bill H. R. 6819, introduced by Representative Wolverton, would have established a Telecommunications Policy Committee to

(1) coordinate the development of telecommunication policies and standards; (2) formulate plans and policies with respect to the best possible utilization of the radio spectrum and communication media in promoting the interests of the United States. Participating agencies were, initially to be the Departments of State, Defense and Commerce, and the FCC with others to be added by the President.¹⁰⁷

The bill failed of enactment.

Working relations between IRAC and the FCC, though described as "cooperative,"¹⁰⁸ proved less than satisfactory with respect to over-all coordination of spectrum allocation in the public interest. As has been indicated, the FCC is responsible for assignments to civilian users, and IRAC, for Federal Government users. Cooperation is therefore necessary in resolving the threshold question of which bands are allocated for as-

104. *Id.* at 91.

105. See Hearings, note 2 at 136.

106. *Id.* at 136-37.

107. *Id.* at 136.

108. MACQUIVEY, note 13 at 96.

signment to civilian use, and which to Federal Government use. As one commentator observed, though the two agencies cooperate with respect to many common problems, this "has not resulted in a reshuffle of the distribution of frequency space between [Federal] Government and non-Government [civilian] users to any substantial extent."¹⁰⁹

Illustratively, on September 8, 1954, the ODM-IRAC undertook a study of the FCC's request for reallocation of frequency band 162-170 megacycles for civilian land-mobile radio service use in the 50 largest standard metropolitan areas and rural areas of the United States.¹¹⁰ An ODM reply letter, dated November 17, 1954, to the FCC outlined the views of the government agencies, which were negative, and suggested that a study embracing the U.S. table of frequency allocations from 27.5 to at least 400 megacycles should be undertaken no later than July 1, 1955. There was no response by the FCC. After additional study, the FCC staff suggested to IRAC an alternative interim proposal for reallocation of 4 megacycles of space in the seven largest areas. An IRAC report of December 20, 1956, however, informed the FCC that IRAC had recommended against the reallocation because it would preclude the satisfaction of vital foreseeable requirements of the Federal Government in the VHF spectrum. The IRAC recommended, instead, another review, this time of the table above 30 megacycles. This ended the matter. The FCC had made specific requests based upon particularized needs and had received no relief and only the most general explanations therefor.

On October 26, 1954, Executive Order 10571-A was issued, assigning frequencies to Federal Government stations as of April 1, 1954. This was the first time since 1928 that all station assignments were listed for review and confirmation by the President.¹¹¹

On November 4, 1954, the President appointed a Cabinet Committee on Telecommunications Policy and Organization. The Director of ODM served as Chairman, and the Secretaries of Defense and State were the other members. The committee was to review all existing policies and programs affecting all forms of electrical communications except domestic broadcasting. The Committee did not report on January 31, 1955, as it had been directed, and on July 3, 1957, it was officially abolished and its responsibility assigned to the Director of ODM.¹¹²

H. *The Middle 1950's*

On June 21, 1955, the Senate Committee on Interstate and Foreign Commerce set up an Advisory Committee on Allocations to make a survey and reappraisal of television allocations. Dr. Bowles, Chairman of the

109. *Ibid.*

110. This illustration is taken from the 1959 Hearings, note 2.

111. *Id.* at 137.

112. Report, note 1 at 78.

Committee, submitted his report in March of 1958. Among the recommendations were the establishment of a communications office or authority as part of the executive structure and an authoritative review of the radio spectrum requirements of the nation as a whole, conducted at the Executive level.¹¹³

On October 11, 1955, IRAC, pursuant to an ODM request of August 15, 1955, created the Select Subcommittee on Frequency Allocations (SSFA) "to insure an equitable distribution of spectrum space among various radio services, provide for the most effective utilization of the radio spectrum, minimize harmful interference, and lay the groundwork in preparation for the next international radio conference, devoting increased and continuing attention to these responsibilities."¹¹⁴ The FCC was asked to work with the subcommittee and accepted, in a "mild way," on November 4, 1955.¹¹⁵

On April 23, 1956, the Telecommunications Advisory Board (TAB) was established by DMO-IX-2 to afford advice and guidance to the Director of ODM on telecommunications mobilization plans and related telecommunication matters.¹¹⁶

Legislative attention to the recommendations of the PCPB (the Stewart Board) was renewed in 1957.¹¹⁷ On March 25, 1957, Senator Potter inquired of the Director of the ODM whether all of the frequencies allocated in radio and television to the Federal Government were being utilized sufficiently to justify continued assignment. The Director, on April 2, 1957, informed the Senator of the Joint ODM-FCC study of the use of the band 50-300 megacycles and the conclusion (of ODM-IRAC) that no space could be released without detriment to national defense and the federal airways. The Senator, however, was not persuaded and on June 18, 1957, introduced Senate Joint Resolution 106 to establish a three-member commission on the allocation of radio and television frequencies. The Commission was to investigate the use of frequencies allocated for Federal Government utilization and to report to the President and Congress.

As passed by the Senate on July 21, 1958, Joint Resolution 106 was amended to provide for a five-member Commission to:

... conduct a thorough and comprehensive study and investigation of the radio and television frequencies allocated to the various agencies and instrumentalities of the Federal Govern-

113. Hearings, note 2 at 138.

114. *Ibid.*

115. *Ibid.*

116. *Ibid.*

117. This section and the following on Sen. J.R. 106 are based in large part on pages 139-40 of Hearings, note 2.

ment with a view to determining (1) whether such frequencies are being efficiently utilized to the maximum degree possible; (2) whether any (and if so, how much) of such frequencies may, without jeopardizing the public interest, be relinquished to the Federal Communications Commission for allocation to non-governmental [civilian] purposes; and (3) what are the likely future requirements of the various agencies and instrumentalities of the Federal Government for radio and television frequencies.¹¹⁸

When the companion bill was reported out by the House Committee, however, the Commission's powers were expanded to include study of civilian frequency usage as well. Thus, as amended, it was to determine:

(1) how such frequencies may be utilized to the maximum degree possible, (2) how planning should be undertaken to take advantage of technological change in achieving the maximum use of the frequency spectrum, (3) whether any (and if so, how much) of such frequencies may, in the public interest, be reallocated to other uses, (4) the likely future requirements of the various non-governmental [civilian] users and agencies and instrumentalities of the Federal government for radio and television frequencies, and (5) the changes, if any, that should be made in the existing administrative organization and procedures for discharging the Federal government's responsibilities in this field.¹¹⁹

The opposition of the broadcast industry to the House measure (since it would have opened for attack the 70 channel UHF television allocation) and the inability of the House and Senate to agree on the Commission's functions resulted in the demise of both the Senate and the House measures.

On July 1, 1958, the Federal Civil Defense Agency (FCDA) and ODM were merged into one office, which later became the Office of Civil and Defense Mobilization (OCDM). The telecommunications functions as assigned to the Director of ODM by Executive Order 10460, were conferred upon the Director of OCDM by Executive Order 10773. On September 5, 1958, the OCDM Telecommunications Area was directed to report to the Associate Director for Resources, who was to report to the Assistant Director for Resources and Production, who was then to report to the Director of OCDM.¹²⁰

On November 4, 1958, OCDM Director Hoegh created the Special Advisory Committee on Telecommunications (the Cooley Committee) to

118. *Id.* at 139.

119. Report No. 2355, August 2, 1958.

120. Hearings, note 2 at 142.

assess the role of the Federal Government in telecommunications. The Director commented:

Our economy and national defense today are highly dependent upon the smooth functioning of our national telecommunications services. The rapidly changing technology and changing needs in [federal] government and non-government [civilian] areas are presenting increasingly difficult problems in telecommunication management. The situation is becoming no less complicated by developments in satellites and space vehicles as well as defense weapons systems.¹²¹

On December 29, 1958, the Committee submitted its report. It concluded that:

(a) any sweeping change in the regulation and control of telecommunications by the Government, and in the legislation therefor, should be considered only after extensive study and the development of a well-thought-out course of action; (b) in advance of such a study, certain immediate steps can and should be taken to strengthen the executive branch side of telecommunications management; (c) it would also seem inappropriate to give the FCC the power to act in matters affecting the executive agencies or responsibilities relating closely to national defense or foreign affairs—these are areas of decision which belong to the President and should be his prerogative to delegate; (d) these broad discretionary functions can best be discharged and the strengthening best be accomplished through the creation of a board within the Executive Office of the President to act for and be answerable to the President in the carrying out of his responsibilities under the Communications Act.¹²²

The Committee recommended legislation creating, in the Executive Office of the President, a National Telecommunications Board. The Board, which was to consist of three members, would be appointed by the President, by and with the advice and consent of the Senate. IRAC was to report to and assist the Board in the performance of such functions as the Board might direct. The Board also would have continuing functions in reviewing the national table of frequency allocations, in cooperation with the FCC, to insure appropriate division of spectrum space between Federal Government and civilian users. It was to study the role of the Federal Government in the management of United States telecommunications and the administrative organizations for discharging the government's responsibilities with particular reference to the division of responsibility under the 1934 Act. The Board was to make recommen-

121. See note 80 at 19.

122. Hearings, note 2 at 142-43.

dations to the President concerning changes in spectrum management and, finally, was to assume responsibility for mobilization planning for telecommunications.¹²³

On March 3, 1959, approximately three months after submission of the Cooley Report, the President recommended the creation of a Special Commission on Telecommunications. In his letter to the Speaker of the House and the President of the Senate, he said:

The telecommunications systems of the United States are essential to the national security, to the safety of life and property, to international relations, to a better informed public, and to the business, social, educational, religious, and political life of the country. They are one of the Nation's most valuable assets.

Changing technology along with changing needs in [Federal] Government and non-government [civilian] areas present problems in the telecommunication field which require searching examination. The situation is becoming no less complicated by prospective developments in satellites and space vehicles, as well as in defense weapons systems.

It was not possible for the Special Advisory Committee during its brief existence to undertake a thorough and comprehensive study of the government's role or to make detailed studies of such problems as radio frequency usage.

In order that such a study can be made, I recommend that Congress establish a Special Commission on Telecommunications, to be composed of five members appointed by the President.¹²⁴

The same day the Director of the OCDM submitted to the Speaker of the House and the President of the Senate a draft joint resolution for the establishment of a commission to undertake the broad and comprehensive study contemplated. The Commission was to study:

(1) the role of the Federal Government in the management of the U.S. telecommunications resource; (2) the administrative organization for discharging the Government's responsibilities with particular reference to the division of responsibility under the Communications Act; (3) the existing methods and procedures for allocating radio frequencies and bands of frequencies as between Federal Government and non-Federal Government [civilian] users; and (4) the existing national table of radio frequency allocations with respect to the apportionment of the various parts of the radio spectrum as between [Federal] Government and non-Government [civilian] users.¹²⁵

123. Report, note 1 at 79.

124. Note 80 at 20.

125. Hearings, note 2 at 36-38.

The Commission was to report back to the President, within twelve months, the results of its study.

A number of bills were introduced to effectuate the recommendation. Principal among these was House Joint Resolution 331 introduced on April 7, 1959, by Representative Harris. Finally, on May 11, 1959, Representative Harris introduced H. R. 7057 to establish a three-member Board in the Executive Office of the President as recommended by the Cooley Committee. This set the stage for the two day panel discussion of June 8 and 9 in the House Subcommittee on Communications and Power of the Committee on Interstate and Foreign Commerce.

I. *The 1959 Hearings*

The hearings opened with a technical explanation of the radio spectrum by Mr. Fred Alexander, Deputy Assistant Director for Telecommunications of OCDM.

When Mr. Alexander concluded his remarks, a comprehensive statement of the problem was made by Dr. Irving Stewart, who had been Chairman of PCPB. After describing the threshold problem of many "good" uses competing for limited frequency space, Dr. Stewart addressed himself to the "organizational aspect" of frequency management:

[Y]ou have dual control over the spectrum. You have the Federal Communications Commission composed of 7 individuals devoting full time to the problem of communications, backed up by a staff. True, they devote part of their attention to other than radio matters, but essentially there is a full-time communication management job. But when you come to the other side of the picture, the [Federal] Government side, you have the ultimate authority in the President of the United States as Commander in Chief, and also exercising certain authority conferred in the Communications Act of 1934. . . .

* * * *

[IRAC, to whom the President has delegated this responsibility,] is an extremely useful technical body, but it is a body composed of users. The situation is one in which naturally there is a desire to accommodate the wishes of the users who participate. There is nobody sitting in the position of arbiter. There is nobody who can ask too many hard questions. There is nobody who has an over-riding task of requiring that the necessity for a particular new assignment be established in the light of all the assignments that have been made in the past.

Nor is it at all certain that these very competent technicians operating at a relatively low technical level have all the informa-

tion about policy, present and future, which might be most useful in making the wisest assignments in the light of future needs. . . .

* * * *

In other words, Mr. Chairman, this situation is one which is made to order for suspicion, and there is every reason to believe that the suspicion does exist. Every service, [Federal] Government or [civilian], is convinced of the importance of its mission.

It is natural for each [Federal] Government department to emphasize the importance of its role; and there isn't inherent in the situation any necessary motivation to conserve frequencies in order that they might be available for non-Government [civilian] use. In many cases in the assignment of frequencies, security considerations must be taken into account, and that means that justifications for the assignments cannot be made a matter of record.

And then when you have no public record, you have another fertile ground for suspicion. Perhaps the assignment was justified but it is going to be pretty hard to convince the man who loses out that it was justified.

* * * *

The need, the important thing, is to correct the organizational arrangement; in the first instance to bring the Government's side of the picture into a posture where there is high level consideration in terms of possible requirements.¹²⁶

As foreshadowed in the above quotation, nearly every one of the participants in the 1959 Hearings was critical of IRAC's role in management of the Federal Governmental sphere of spectrum allocation. IRAC was a "body composed of users." Nobody could ask the "hard questions." Nobody could require "justification" for frequency assignments.¹²⁷

Mr. Harold Fellows, President of the National Association of Broadcasters, testified in pertinent part, as follows:

[A]lthough all the non-Government [civilian] users present information of use and justification for what they request in the spectrum, similar information is not submitted with respect to the [Federal] Government use of the spectrum which might indicate how the entire natural resource could best be utilized. The [Federal] Government users are not required to justify

126. *Id.* at 33-35.

127. Note 80 at 21.

before Congress, public opinion, or any impartial body, their use of frequencies.

* * * *

In certain areas, there seems to be an unwillingness on the part of [Federal] Government representatives to freely discuss problems of concern to all of us, and there is certainly an inability on the part of non-Government [civilian] users to obtain the information regarding Government usage which is pertinent to any resolution of the problems.

* * * *

There was initial disagreement on the mechanism for the assignment of frequencies, which led to establishment of the Interdepartmental Radio Advisory Committee and the current situation where the non-Government [civilian] use is an open book—with full justification—and the [Federal] Government use is a closed book, with no comparable justification to that required of non-Government [civilian] users.

* * * *

We believe, too, that the solution to the entire problem is the proper administration of all the spectrum used by both [Federal] Government and non-Government [civilian]. This will eventually supply an answer to the myriad of service problems which tend to confuse and retard the orderly expansion of these services in the best interest of the American people.¹²⁸

Mr. Victor Cooley, who had been Chairman of the Special Advisory Committee on Telecommunications, testified to similar effect:

I think it has been pointed out that the public side as administered by the FCC is handled in a very thorough manner. Public hearings are held, of course, and as Mr. Fellows just stated, justification must be made for any assignment of frequency.

* * * *

On the other hand, on the [Federal] Government side we don't find such a thorough and businesslike approach to the question of assignment, because there is no authoritative voice any place in the Government except the President, or the Director of the Office of Civil and Defense Mobilization acting for the President who may resolve a controversy or say how [Federal] Government frequencies shall be assigned. Now IRAC is a committee of representatives of agencies involved in the usage of radio frequencies, and they are very competent people.

128. Hearings, note 2 at 36-38.

They understand the use of the spectrum, but as has been pointed out, there is no one on IRAC that has any authority whatever to say that the Defense Department request shall prevail—for instance, if Defense wants something and if Commerce wants the same thing, or if some other agency is interested in the same frequency, there is no one that can say, after hearing all facts, “This frequency should go to Defense or that frequency should go to Commerce.”

Despite this organizational deficiency, it is only fair to say that according to my understanding up to now, every agency has received by and large what they needed.

But a lot of it has been through compromise and trading back and forth, not because any group or board with authority to handle such things has decided after full examination that this frequency should go here or this one should go there. That is the main thing that I should say, the main conclusion that our committee came to, that there should be on the [Federal] Government’s side the kind of examination and study and evaluation of frequency assignments with an authoritative voice acting on behalf of the President to make these assignments that prevail on the non-Government [civilian] side.

[W]hereas the FCC decides in an authoritative evaluated way whether or not an assignment should be made to this applicant or that applicant there is no one that does that on the [Federal] Government’s side. On the [Federal] Government’s side if Navy, for instance, needs a particular frequency and the Air Force say they need the same frequency, although they start out wanting the same frequency, they can probably by compromise decide that maybe another frequency will do for Navy or Air Force can get along with a different one.¹²⁹

As to negotiations between IRAC and the FCC in the event of a contest between Federal Government and civilian requests for a particular band, the following discussion with the then-Chairman of the FCC, Mr. Doerfer, appears very pertinent:

The Chairman. Is it not a fact that right now OCDM has asked the Federal Communications Commission to give up aviation channels, 8500 megacycles, for Federal Government use, and the Commission has done so, solely on your statement. Is that true?

Mr. Doerfer. That is correct.

129. *Id.* at 49-50, 52.

The Chairman. And also is it not a fact that on that action there is litigation pending at the moment?

Mr. Doerfer. That is right.

The Chairman. There is the example, Mr. Moss.

Mr. Doerfer. There is no litigation between the Federal Communications Commission and the Office of Civil Defense.

Mr. Moss. And the Federal Communications Commission, having great confidence in the OCDM, accommodated them?

Mr. Doerfer. On the basis that the OCDM was responsible for the national security to a much closer and greater extent than we are, and we were in position to do that with respect to that.

So that, when they indicated that they wanted that, we could not find any specific authority in the act whereby we could say no. We did the other thing.

Mr. Moss. Is there any specific authority in the act that makes that possible for them?

Mr. Doerfer. No; other than when you say "they". I have in mind the President. OCDM is asking for the President.

Mr. Moss. I think this gets to a rather important question, Mr. Chairman:

That you give up something to another Government agency, just on the mere representation that you should do it. You have not had a hearing which would enable you to determine whether the request is a proper one or not; whether, in fact, the security of the Nation is involved. As you probably know, for 4 years I have spent some time on another committee where I have had Government witnesses say that security is involved here, and I have found that the security was so remote and nebulous that it would be almost impossible to identify it.

There is no one here on behalf of the communications agencies to say, or to determine whether or not the Government agency is making a valid case, whether there is a compelling Government requirement for the channels it has requested.¹³⁰

Mr. Doerfer. I think that is a correct statement.

And, finally, the testimony of General Quesada, himself concerned with spectrum allocation on the Federal Government side for some twenty years, is worthy of quotation:

Now I must say to you in all sincerity that my memory

130. *Id.* at 87-88.

searching back over the 20 years tells me that in practically every case I was subjective and not objective. I was a contestant. I hoped for a status quo, at least a status quo in respect to what I had. I often sought what somebody else had, and this is characteristic not only of me, but of practically everybody who has ever been involved in this problem. It is an occupational disease, if I may refer to it as such. It is a frailty of human nature, also.

Now it isn't uncommon for a person, and I have to say perhaps I have been guilty of this, to harbor my frequencies or to harbor an assignment of frequencies even to the point of denying data and information as to their use. It isn't uncommon to generate use when a frequency is challenged. I personally feel that IRAC is not as effective as it should be and I personally feel that it is almost ineffective. And I say this being a party to it, and I say it knowing that perhaps I contribute to its ineffectiveness. I must cite the reasons.

There are 12 members of IRAC. Each member is a contestant with and against other members. Under those circumstances I doubt the ability of any member to be really objective. I doubt very seriously. Again if this is the case, I would attribute it to the frailties of human nature.¹³¹

A number of the panelists favored H. R. 7057 which would have created a three-member National Communications Board with the task of improving government management and as a vehicle for negotiating with the FCC on a coordinated long range allocation policy. While further spectrum studies were proposed by some panelists,¹³² the group favoring H. R. 7057 believed that such studies would merely delay an organizational solution which was sorely needed. Their view, further, was that if cooperation between the NCB and the FCC did not materialize, it would then be appropriate to study the necessity for a single agency or super-board.¹³³ Others believed that a single agency was necessary and desirable at the outset and hence frowned upon H. R. 7057.

In consequence, no definitive conclusions or recommendations were forthcoming from the hearings. Substantial talent had been assembled, the pressing problems of frequency allocation were once again well articulated, but no kind of consensus had developed.

J. *The Bendix Litigation*

The year 1959 was also significant as the date of the *Bendix* case. On April 11, 1958, the ODM had transmitted to IRAC and the FCC proposals for revising the national table of frequency allocations. The FCC

131. *Id.* at 196-97.

132. *E.g.*, Hearings, note 2 at 236 (testimony of Mr. Everett).

133. Note 80 at 25.

was advised that changes in the national table of frequency allocation were of such urgency to national defense that immediate consideration was paramount. Discussions between IRAC and the FCC respecting the table of frequency allocations above 27.5 Mc/s in preparation for the 1959 Radio Conference dated back to December 3, 1957. However, the April 11 proposal was to the effect that defense considerations precluded further delay.¹³⁴

Accordingly, on April 16, 1958, the FCC adopted Order FCC 58-379 which made certain allocation changes immediately, without first obtaining public comment. The effect of this action was to change the existing shared use of 420-450 Mc/s to exclusive use of the Federal Government. Further, the 8500-9000 Mc/s frequency, previously a shared use for radio-navigation between Federal Government and civilian, was allocated to exclusive Federal Government use for radio positioning, subject to temporary sharing on terms less favorable than before to civilian users. As a result, representatives of industry and commercial aviation petitioned the FCC to vacate the April 16 Order, particularly the allocation changes for frequency bands 420-450 and 8750 Mc/s. The OCDM opposed the petitions of the aviation and industry groups on the ground of national defense requirements. Finally, on July 30, 1958, the FCC adopted: (1) Order FCC 58-745 denying the petitions to vacate its April 16 Order; and (2) Order FCC 58-750 making final the allocation of 13,250-13,400 Mc/s for aeronautical radionavigation (the doppler navigator). On August 29, 1958, Bendix Aviation Corp. filed, in the United States Court of Appeals for the District of Columbia, Appeal No. 14,650 from FCC Order 58-745.¹³⁵

As noted above, the reason for the FCC Order was an OCDM request to the FCC for a reclassification of frequencies because of defense requirements. While the FCC revealed from the outset that such representations had been made to it as a basis for the requested allocation changes, it never disclosed the reasons underlying the defense requirement request, invoking its power to "withhold publication of records of proceedings containing secret information affecting the national defense."¹³⁶ Thus, the FCC merely stated in the April Order:

Based upon the representations that have been submitted to it concerning the requirements of national defense, the Commission finds that it would be in the public interest to amend its rules to permit the orderly satisfaction of those requirements.¹³⁷

In its July Order (58-745), the FCC stated similarly:

This action was taken on the basis of representations made rela-

134. Hearings, note 2 at 142.

135. *Ibid.*

136. Federal Communications Act of 1934, § 4j.

137. Note 80 at 36.

tive to the performance of functions vital to the national defense. Moreover, the OCDM has informed the Commission that the granting of the requests in the various petitions for reconsideration would have a serious effect on national defense capabilities. The public interest, therefore, requires that the several requests for reconsideration, hearing, stay and/or reallocation be denied.

It was the July 31 Order from which Bendix appealed, asserting in pertinent part that the Commission had erred in dismissing without a hearing the Bendix application for experimental use of the 430 Mc frequency in two of its aircraft, and questioning, in fact, the very legality of the procedures by which the initial decision was made.

On November 13, 1959, the Circuit Court of Appeals for the District of Columbia delivered its decision.¹³⁸ Bendix's argument on the absence of a hearing was dismissed summarily on the ground that "when the Bendix application was filed, the frequency of 430 Mc had already been withdrawn from the field of non-Government [civilian] use except as the Commission authorized temporary use of the frequency until February 15, 1963, for the radio altimeters and for amateurs service."¹³⁹

On the second point, *i.e.*, the legality of the Commission's initial action, the court analyzed at some length the authority of the Commission under its enabling act and particularly Executive Order 10460. In upholding FCC Order 58-745, the court declared national defense needs to be "paramount."¹⁴⁰ The court said:

We have fully appreciated the importance of the issue. We do not question that Bendix is competent and qualified. We recognize the depth of the conflict between the demands of the Executive on the one hand and of private but important non-Government [civilian] entities on the other. Various possibilities of abuse can be conjured were we to speculate, but we cannot assume and there is no slightest suggestion of record, that there has been a "perversion of the Commission's administrative processes for an improper purpose." On the contrary, the action complained of reflects compliance with the position of the Executive taken in the national interest. A reading of the terms of Executive Order 10460 demonstrates its harmonious accommodation to emergencies which Congress in writing the Communications Act must have foreseen. Thus tested the Commission's action, pursuant to Sections 1, 4(i), and 303(c), (f), (g), and (r) of the Act, was authorized.

138. *Bendix Aviation Corp. v. FCC*, 272 F.2d 533 (D.C. Cir. 1959), *cert. denied sub nom. Aeronautical Radio, Inc. v. United States*, 361 U.S. 965 (1960).

139. 272 F.2d 533, 536.

140. *Id.* at 538.

National trust and responsibility must be reposed somewhere and in this situation, by Section 305 of the Communications Act and otherwise, they are centered in the President with all his vast power. He is the Commander in Chief. That the national emergency declared in Proclamation No. 2914 has occasioned continued and still present concern is public knowledge.

Bendix, substantially on the grounds treated, has attacked the Commission's denial of its requested experimental license authority, despite the fact that the frequency it sought was no longer available for non-Government [civilian] use. We are satisfied that the challenged action of the Commission must be sustained and accordingly, the dismissal of the Bendix applications and the denial of reconsideration were proper.¹⁴¹

K. *The 1960's*

The 1960's commenced with a significant report by the Library of Congress for then-Senator Lyndon Johnson's Committee on Aeronautical and Space Sciences. The Report observed:

Successful scientific exploration of outer space and application of the results for both peaceful and military purposes depends critically upon reliable and uncluttered radio communications between vehicles in space and ground stations. Similarly, the study of feeble radio signals from unknown extraterrestrial sources, which some day may permit all weather navigation as men now steer by the stars, requires complete freedom from radio interference. Without such control over users of the radio frequency spectrum, there is serious risk that vital data from difficult and costly experiments will be lost, or even worse, the lives of human space passengers. Jamming of radio signals which could deflect satellites from their course is an ever present danger at launching or during reentry, so that inadequate control of radio transmissions also represents a clear hazard to life and property of the general public.¹⁴²

The basic problem, in the view of the Report, was one of management. It was clear that the spectrum was a public resource and should therefore be managed and allocated "as though it were a rare and limited mineral."¹⁴³ Dual control clearly did not meet this requirement, as the Report concluded, quoting Loeber's Regulations and Administration of Telecommunications in the United States (p. 92 of the Report):

With respect to national policy, none has yet been formulated

141. *Id.* at 539-40.

142. President's Communications Policy Board, Telecommunications, A Program for Progress 83 (1951).

143. *Id.* at 28.

and adopted which clarifies the dual control of the radio frequency spectrum by the FCC and the IRAC . . . no criteria have been established between the conflicting needs of Federal Government and non-government [civilian] users Just as the United States lacks a clear policy for dividing the spectrum among its own users, so it lacks a policy for guidance in preparing the national position for international negotiations.¹⁴⁴

After the Presidential election of 1960, James Landis was appointed by President-elect Kennedy to study and make recommendations respecting communications management. In December, Mr. Landis outlined the lack of coordination in both the international and national communications field. Neither the State Department nor the OCDM has been able to provide the necessary leadership because their other activities were too varied to permit communications to reach the high level of concern that it warranted. He recommended the creation, within the Executive Office of the President, of an office for the Coordination and Development of Communications Policy, and that there be transferred to this office all the powers relating to telecommunications then vested in OCDM.¹⁴⁵

As a result of these recommendations, but not in conformity with them, the new President created, by Executive Order 10995, a new office within the White House, *i.e.*, Director of Telecommunications Management in the Office of Emergency Planning (OEP). The office was to be held by an assistant director of OEP. The OEP Director was delegated authority under section 305 of the 1934 Act "to assign, amend, modify or revoke Federal Government frequency assignments, and he was authorized in turn to redelegate this authority as well as that conferred by Executive Order 10705."¹⁴⁶ Executive Order 10460 was revoked.

The functions to be performed by the new office were as follows:

It was the job of the Director of Telecommunications Management, subject to the authority and control of the President, to coordinate telecommunications activities of the executive branch and to be responsible for formulating the general policies after consultation with appropriate agencies. He was to promote and encourage the adoption of uniform policies and standards by agencies authorized to operate telecommunications systems; develop data with regard to Federal Government frequency requirements; encourage research and development in the field and contract for studies and reports.¹⁴⁷

The redelegation of functions from the OEP Director of the Director

144. *Ibid.*

145. See Report, note 1 at 79.

146. *Id.* at 79-80.

147. *Id.* at 80.

of Telecommunications Management was consummated in February of 1962. OEP also directed IRAC to report to the Director and, subject to his approval, to assign frequencies on an interim basis.

In August of 1962, the Communications Satellite Act¹⁴⁸ was passed. Several additional responsibilities were thereby reposed in the President.

These included the coordination of the activities of Federal Government Agencies with responsibilities in the field of telecommunications, so as to insure effective compliance with the policies of the Communications Satellite Act and the attainment of "coordinated and effective use of the electromagnetic spectrum," and the technical compatibility of the system with existing communications facilities.¹⁴⁹

It will be recalled that the Director of Telecommunications Management, under Executive Orders 10705 and 10995, was charged with the duties of coordinating telecommunication activities of Federal agencies and of formulating Government policy. The President thus possessed a ready source for advice and assistance. Nevertheless, he made no formal delegation of his duties under the Communications Satellite Act of 1962 until the National Communications System was established by him a year later.¹⁵⁰

On June 5, 1963, President Kennedy established an *ad hoc* Communications Satellite Group under the joint chairmanship of Deputy Attorney General Katzenbach and Director of the Office of Science and Technology, Dr. Wiesner. The purpose of the Group was to provide a forum for the various Federal Government agencies concerned with satellite communications and to provide coordination on an informal basis.¹⁵¹

October and November of 1962 brought the Cuban Missile crisis and with it was accentuated the "inadequacy of Federal Governmental communications in carrying a very heavy load of high priority traffic under emergency conditions." The result was an Interdepartmental Committee on Communications under the Chairmanship of then-Deputy Under Secretary of State Orrick.

Then, on August 21, 1963, upon the completion of the Orrick Committee's work, the President established the National Communications System.¹⁵² The objective of the NCS was to provide a

unified Federal Governmental communications system for operation under all conditions ranging from a normal situation to

148. 76 STAT. 419.

149. Report, note 1 at 80-81.

150. *Id.* at 81.

151. *Ibid.*

152. 1964 Hearings, pt. 1, app. 4B, p. 592.

national emergencies and international crises, including nuclear attack. Initial emphasis, however, of the system was to be on meeting the critical needs for communications in national security programs, particularly to overseas areas.¹⁵³

The work of NCS has been described as follows:

The NCS was conceived as comprising primarily the long-haul, point-to-point trunk communications capable of serving one or more executive agencies. By now, the system includes communications facilities of, and channels available to, the Departments of Defense and State, the Federal Aviation Agency, the National Aeronautics and Space Administration, and the General Services Administration.

The NCS includes important communications capabilities necessary for command and control of our military forces and foreign crisis, but networks devoted to tactical and other limited and local needs are specifically excluded. Domestic communications needs of the Federal agencies dealing with civil functions are met by the Federal Telecommunications System, established in 1961 and managed by the General Services Administration, and which is now incorporated in the NCS. Additional governmental communications components are being studied for the possible inclusion in the NCS.

The NCS is being developed not as a single, but rather as an integrated system in which the various governmental networks are linked and managed by separate organizations according to standardized and unified policies and plans. The kinds of communications available in the system include telephone, message, facsimile, and data carried over an assortment of facilities such as radio, microwave, landline, submarine cable, and others. Satellite communications will take their place among these facilities as they become available, but are expected to supplement other methods, rather than replace them, for some time at least.

The policy direction and guidance of the National Communications System are the responsibility of the Director of Telecommunications Management under the President's memorandum of August 21, 1963. The Director, according to the memorandum, also serves as Special Assistant to the President for Telecommunications. Nothing specifically was said in the President's memorandum about the possible relevance to the NCS of the new art of satellite communications, but the Presi-

153. Report, note 1 at 82.

dent, in giving tasks to his Special Assistant, also charged him with the duty of assisting the President with respect to his coordinating and other functions under the Communications Satellite Act of 1962.¹⁵⁴

The post of Director of Telecommunications Management was at this time vacant. In the interim, Dr. Wiesner, the President's science adviser, was designated to perform the functions pertaining to NCS which had been assigned to the Director in his new role as Special Assistant to the President. Without the guidance of a full-time Director, the Secretary of Defense moved ahead with his own tasks under the August 21 directive. The Secretary, as executive agent of NCS, was to design, develop and operate NCS. In this capacity, he began to negotiate with the Communications Satellite Corporation to effect a joint system of control and operation. A further letter from the White House to Secretary McNamara on March 26, 1964, gave Presidential authorization to the Secretary of Defense, as executive agent for NCS, to arrange with the corporation for procurement of satellite communications services for NCS in accordance with its needs.¹⁵⁵

The fact that negotiations were carried on without participation of other federal agencies indicates that communications coordination was still not at optimum levels even in the Federal Government sphere. NASA and State were not even consulted.¹⁵⁶ Finally, in April of 1964, the President filled the post of Director of Telecommunications Management with the appointment of General O'Connell. As the Military Operations Subcommittee of the House Committee on Government Operations observed in its 1964 Report on Satellite Communications:

General O'Connell, the new appointee brought to the situation the high-level attention it required, and, as noted above, he participated actively in the final analyses and deliberations which culminated in the Defense Department's decision to abandon the idea of a joint commercial-Government system and in the conclusion of an international agreement covering the future ownership and direction of the global commercial communications satellite system.¹⁵⁷

While noting these developments, however, the Report concluded by enumerating four basic problems still to be faced by the Director. These conclusions demonstrate that the old problems remain, made once again more acute by advancing technology and expanded needs. Thus:

(1) *Optimum utilization of the frequency spectrum.*—Dual

154. *Id.* at 82-83.

155. 1964 Hearings, pt. 1, p. 463.

156. Report, note 1 at 85.

157. *Ibid.*

control . . . seems to be a permanent feature, and therefore the need is one of better coordination and efficient administration. IRAC often has been described as a "logrolling" operation, and the processing of agency applications is a slow one. This process could be streamlined, particularly if the Office of the Director of Telecommunications were strengthened.

(2) *Exploitation of an expanding technology.*—Although inventions and changes cannot be planned, their use can be. Moreover, an atmosphere can be created within Government which encourages research and development, while retaining some measure of centralized control and review.

(3) *Adequate guidance and planning of the national communications system.*—As the establishment of the NCS goes forward, attention should be given to the overall Government responsibility for communications. This should come from a central source, already identified in the President's memorandum of August 1963 as the Director of Telecommunications Management, also acting as Special Assistant to the President for Telecommunications. Furthermore, although emphasis is now being given to critical national security needs, the planning effort if properly and thoroughly accomplished will insure that decisions with respect to the entire range of governmental communications, both military and civil, will not be prematurely preempted.

(4) *Achievement of U.S. satellite communications policy.*—The Satellite Communications Act of 1962 sets forth a wide range of governmental objectives in the area of satellite systems, potentially in conflict with each other. The act places heavy responsibilities on the President to effect these goals as well as to avoid conflicts. By the memorandum of August 1963, the Director of Telecommunications Management was specifically charged with assisting the President in carrying out his responsibilities. The Director may need a fuller delegation of powers so as to afford Government management at the highest level of this developing new field. Surveillance of this area cannot be confined to the activities of the commercial system but must also extend to the possibilities of Government use of this medium.¹⁵⁸

While it is noteworthy that the Military Operations Sub-Committee referred to the "dual control" of the spectrum by the FCC and the President (by IRAC) as seemingly "a permanent feature," it is significant that it did so without enthusiasm, in company with so many others who

158. *Id.* at 86-87.

have analyzed the problem of radio frequency allocation in the past twenty years.

Developments during the past two years have, if anything, accentuated pressure on the spectrum. Thus, the all-channel legislation of 1962¹⁵⁹ and the recent FCC action terminating its seven-year-old proceeding¹⁶⁰ have, for the present at least, effectively removed 535 Mc/s of frequency spectrum (70 TV channels of UHF) from consideration for possible reallocation to other competing uses, civilian as well as Federal Government.¹⁶¹

In this situation, the need becomes imperative for optimum levels of management capability. A system is required that will guarantee the most equitable distribution of frequency usage, consistent with the national interest. Before turning to an evaluation of current management practices, however, the organizational structure in which allocation decisions themselves are made is in order. This is the subject of Part II.

II. PRESENT ALLOCATION AND ASSIGNMENT PRACTICES

As shown in Part I, government management of allocation and assignment practices is presently bifurcated. The Federal Communications Commission (FCC) is charged with the responsibility for the assignment and regulation of frequencies used by civilian users, whereas the President is responsible for the allocation of frequencies to Federal Government users. This latter responsibility, the President has delegated to the Director of Telecommunications management with the assistance of the Interdepartment Radio Advisory Committee (IRAC).¹ The procedures employed under this dual framework of allocation and assignment practice, both civilian and Federal Government, are the subject of this Part.

159. 76 STAT. 150.

160. FCC Order No. 64-264, request to reconsider denied FCC Order No. 64-451.

161. Congressional intent is clear that "the use of all 82 channels" is required for a national television system. Thus, House Report No. 1559, 87th Cong., states:

All of the 82 channels allocated for television use, however, will be required if the goal of an adequate educational and commercial television is to be achieved. The proposed all-channel legislation is the only workable method by which this goal can be achieved.

Senate Report No. 1526 of the 87th Congress states in the same vein:

In view of the long difficult history of the television allocations structure since 1952, the committee is impressed by the judgment of the Commission that development of an adequate, truly nationwide television system requires the use of all 82 channels and it is for this reason that it is urging the enactment of this legislation.

The Senate Report goes on to state:

We emphasize that the aim of this measure is an intermixed television system using both 12 VHF and 70 UHF channels.

1. Executive Order 10995.

A. FCC Allocation and Assignment Practice

(1) *In General*

At the outset a distinction should be made between frequency allocation among the various usages, *e.g.*, fixed mobile, aeronautical radionavigational, amateur broadcasting, *etc.*, and assignments to particular users within a particular allocation, *e.g.*, to Station XYZ, rather than a competing applicant, to use a particular frequency within the broadcast allocation. The Communications Act of 1934, as amended, endows the FCC with both functions as the following excerpt from section 303 of the Act indicates:

Section 303. Except as otherwise provided in this Act, the Commission from time to time, as public convenience, interest, or necessity requires, shall—(a) Classify radio stations;

(b) Prescribe the nature of the service to be rendered by each class of licensed stations and each station within any class;

(c) Assign bands of frequencies to the various classes of stations; and assign frequencies for each individual station and determine the power which each station shall use and the time during which it may operate.

The distinction is not merely academic, because different procedures obtain depending upon which of these types of decisions is being made, *i.e.*, allocation or assignment. The difference lies in the fact that decisions respecting the table of allocations generally, *e.g.*, the shift of a particular band from television to fixed mobile, involves *rule-making*,² whereas the assignment of a particular frequency within a designated band usage to a particular applicant, accomplished through licensing, is *adjudication*.³ Both the Federal Administrative Procedure Act⁴ and the FCC Rules and Regulations⁵ follow this distinction.

2. See, *e.g.*, discussion at notes 163-65 in Part I.

3. See Sections 2(d) and 2(e) of the APA.

4. 60 STAT. 237:

The objectives of the Federal APA have been stated as follows:

1. It provides that agencies must issue as rules certain specified information as to their organization and procedure, and also make available other materials of administrative law. (Section 3)
2. It states the essentials of the several forms of administrative proceedings (Sections 4, 5, and 6) and the limitations on administrative powers. (Section 9)
3. It provides in more detail the requirements for administrative hearings and decisions in cases in which statutes require such hearings. (Sections 7 and 8)
4. It sets forth a simplified statement of judicial review designed to afford a remedy for every legal wrong. (Section 10)

United States Congress, Senate, Committee on the Judiciary, Federal Administrative Procedure Act, Report of the Committee on the Judiciary, 79th Congress, 1st Session, on S. 7 (Washington: Government Printing Office, 1945), pp. 6-7.

5. Contrast FCC Rules, Part I, Subpart C, §§ 1.411-1.427 (Rule-Making) with §§ 0.441-0.453, 1.111-1.1119, §§ 2.100-2.603 (Adjudication).

In passing it should be noted that the FCC is one of the agencies of government most affected by the APA. As observed by a former General Counsel of the FCC:

Of all the federal administrative agencies . . . the Federal Communications Commission (FCC) furnishes the most conspicuous example of the use of licensing as the weapon of regulation. It is true that, under the very broad definition of "license" in the Federal Administrative Procedure Act, most of the other agencies also make use of this weapon but none, I think, does so to the same extent, or in the same all-embracing manner, or over a subject matter having equal significance.

My discussion begins, and will end, with the thought that no field of administrative procedure presents greater problems, or is open to greater abuses, or has been less adequately explored than licensing. I need not tell you what rapid strides it has made in recent years as a favorite method of government of achieving regulatory purposes. The FCC may be regarded as the principal laboratory where experimentation in its possibilities and dangers has been carried on. It is appropriate, therefore, that considerable attention should be focused on the impact of the new statute of this agency.⁶

It has been said that the difference (noted above) between rule-making and adjudication is the very basis of the Federal APA. Thus, Mr. Justice Clark, when Attorney General, wrote as follows:

[T]he entire Act is based upon a dichotomy between rule making and adjudication. Examination of the legislative history of the definitions and of the differences in the required procedures for rule making and for adjudication discloses highly practical concepts of rule making and adjudication. Rule making is agency action which regulates the future conduct of either groups of persons or a single person; it is essentially legislative in nature, not only because it operates in the future, but also because it is primarily concerned with policy considerations. The object of the rule making proceeding is the implementation or prescription of law or policy for the future, rather than the evaluation of a respondent's past conduct. Typically, the issues relate not to the evidentiary facts, as to which the veracity and demeanor of witnesses would often be important, but rather to the policy-making conclusions to be drawn from the facts Conversely, adjudication is concerned with the determination of

6. Caldwell, *The Federal Communications Commission*, in *THE FEDERAL ADMINISTRATIVE PROCEDURE ACT AND THE ADMINISTRATIVE AGENCIES* (Warren ed. 1947).

past and present rights and liabilities. Normally, there is involved a decision as to whether past conduct was unlawful, so that the proceeding is characterized by an accusatory flavor and may result in disciplinary action. Or, it may involve the determination of a person's right to benefits under existing law so that the issues relate to whether he is within the established category of persons entitled to such benefits. In such proceedings, the issues of fact are often sharply controverted⁷

As a result of the distinction and its legal implications, separate treatment is herein accorded to allocation between usages or services (rule-making) and licensing of particular users within a usage allocation (adjudication).

(2) *Rule-Making*

As suggested above, both the APA and the FCC, by its Rules and Regulations, have provisions governing rule-making proceedings. The provisions are phrased in general terms, inasmuch as their application extends far beyond changes in the existing allocation table. Since such changes, however, fall within the contemplation of the provisions relating to rule-making,⁸ they form the necessary vehicle through which allocation decisions must be made.

The applicable sections of the APA are 2(c) and 4. Section 2(c) in defining those situations to which the requirements of the rule-making section, *i.e.*, 4, apply, employs the "effect-in-time" test,⁹ first announced by Supreme Court Justice Oliver Wendell Holmes. Thus, a rule, as opposed to an order or adjudication, means the "whole or any part of any agency statement of general or particular applicability and *future effect* designed to implement, interpret, or prescribe law or policy. . . . 'Rule making' means agency process for the formulation, amendment, or repeal of a rule."¹⁰ As decisions with respect to the allocation table clearly comport with this definition, changes therein consist of rule-making within the meaning of the APA and section 4 must be complied with.

Assuming the applicability of section 4, interested parties are assured four guarantees. First, section 4(a) requires notice of the proposed rule making to be published in the Federal Register. The notice requirements are rather specific, and include (1) a statement of the time, place, and nature of public rule-making proceedings; (2) reference to the authority under which the rule is proposed; and (3) either the terms or substance of the proposed rule or a description of the subjects and issues involved.

7. CLARK, ATTORNEY GENERAL'S MANUAL OF ADMINISTRATIVE PROCEDURE ACT 14 (1947).

8. 66 STAT. 713.

9. See Schwartz, *A Decade of Administrative Law*, 51 MICH. L.R. 775, 801 (1953).

10. *Prentis v. Atlantic Coast Line Co.*, 211 U.S. 210, 226 (1908).

Second, section 4(b) requires that "interested persons" be afforded an "opportunity to participate in the rule making." The form of the participation, *i.e.*, written submission or oral hearing, is confided to the discretion of the agency. Third, section 4(b) requires that prior to promulgation of the rule, the agency must consider "all relevant matter presented," and incorporate in any rules adopted "a concise general statement of their basis and purpose."¹¹ Fourth, section 4(d) provides that the agency shall "accord any interested person the right to petition for the issuance, amendment, or repeal of a rule."

The applicable FCC provisions appear in Part I, Practice and Procedure, Subpart C, §§ 1.411-1.427, of the FCC Regulations. The FCC Rules follow the APA requirements fairly closely. Thus, section 1.412 requires that notice be given of any proposed rule making by publication in the Federal Register. This may, however, be waived where "impracticable, unnecessary or contrary to the public interest." Section 1.413 is practically identical with section 4 of the APA in the three notice requirements prescribed. Also similar are section 1.415 in which interested persons have the "opportunity to participate"¹² (the form is here, too, made discretionary with the Commission), and section 1.425 which requires that the Commission "consider all relevant comments and material of record before taking final action in a rule making proceeding." Finally, the Commission must render a written decision with a statement of its reasons therefor.

It is noteworthy that both section 4 of the APA and the FCC Regulations afford "interested parties" two rights that they would not otherwise possess, *i.e.*, antecedent publicity (notice) and opportunity to participate (a hearing). Notice and hearing, the very essence of procedural due process, do not constitutionally obtain in rule-making proceedings. As Mr. Justice Holmes observed:

Where a rule of conduct applies to more than a few people it is impracticable that everyone should have a direct voice in its adoption. The Constitution does not require all public acts to be done in town meeting or an assembly of the whole. . . . There must be a limit to individual argument in such matters if government is to go on.¹³

It is necessary to point out, however, that although the requirements of notice and hearing are provided by statute and must thus be com-

11. The significance of the rule is, of course, limited by the decision in *United States v. Morgan*, 313 U.S. 409 (1941).

12. The language is identical to that in APA, Section 4(b).

13. *Bi-Metallic Investment Co. v. State Board of Equalization of Colorado*, 239 U.S. 441 (1915).

plied with, rule-making is *not*, by this means, elevated to the same level as adjudication. Where adjudication is involved, due process does obtain, assuming a "right" rather than a "privilege" is in issue,¹⁴ and a full trial-type hearing is required.¹⁵ The hearing provided by the APA and the FCC Regulations, on the other hand, extends only so far as the statute provides. For example, under neither section 4 of the APA nor the FCC Regulations is an *oral* hearing required. That is a matter within the discretion of the Commission. On the other hand, were adjudication involved, and thus a due process hearing necessitated, serious constitutional problems would exist with respect to denial of an oral hearing if a material issue of fact were present.¹⁶

In addition to allocation decisions themselves, rule-making is also employed by the Commission "for determining the *justification* for use and the *details* of frequency assignments to non-Federal Government [civilian] users in certain services. . . . These rules vary, depending upon the class of service being rendered, the type of equipment available, and the responsibility of the licensees."¹⁷

The rule-making authority delegated to the Commission is extremely broad, and has been upheld as constitutional. As stated by the Attorney General's Committee on Administrative Procedure:

Vast rule-making powers have been delegated to the Commission, which is to be guided by the standard of public convenience, interest and necessity in promulgating regulations¹⁸

The validity of the delegation of power to the Commission under this standard was established even before its creation, in *Federal Radio Commission v. Nelson Bros., Bond St. Mfg. Co.*, 289 U.S. 266 (1933).¹⁹

The rules promulgated, "delineate what constitute such public interest, convenience, and necessity under various situations."²⁰ The present Rules of Practice and Radio Regulations of the FCC Rules are divided into twenty-three parts as follows:²¹

14. *Cf. Bailey v. Richardson*, 182 F.2d 46 (D.C. Cir. 1950).

15. See generally, JAFFE & NATHANSON, *ADMINISTRATIVE LAW* 562-98 (2d ed. 1961).

16. See generally, BURRUS, *ADMINISTRATIVE LAW AND LOCAL GOVERNMENT* 41-71 (1963).

17. MACQUIVEY, *FREQUENCY ASSIGNMENT ADMINISTRATIVE CONTROL* 187-88 (1956).

18. Document No. 186, 76th Cong., 3d Sess. (Monograph, p. 3).

19. See also, *National Broadcasting Co. v. United States*, 319 U.S. 190 (1943).

20. MACQUIVEY, note 17, at 188.

21. PIKE & FISHER, 1 *RADIO REGULATION* 49:1 (Current Service).

Title of Part	Former Part Number	Redesignated Part Number
Commission organization	0	0
Practice and procedure	1	1
Frequency allocations and radio treaty matters; general rules and regulations	2	2
Radio broadcast services	3	73
Experimental, auxiliary and special broadcast services	4	74
Experimental radio services (other than broadcast)	5	5
Stations on land in the maritime services	7	81
Stations on shipboard in the maritime services	8	83
Aviation services	9	87
Public safety radio services	10	98
Industrial radio services	11	91
Amateur radio service	12	97
Commercial radio operators	13	13
Public fixed stations and stations in the maritime services in Alaska	14	85
Radio frequency devices	15	15
Land transportation radio services	16	93
Construction, marking, and lighting of antenna structures	17	17
Industrial, scientific, and medical equipment	18	18
Citizens radio service	19	95
Disaster communications service	20	99
Domestic public radio services (other than maritime mobile)	21	21
International fixed public radiocommunication services	6	23
Satellite communications	25	25

It will be observed that the Rules relate to general matters, *e.g.*, the first three parts, as well as to specific radio services, *e.g.*, radio broadcast.

Most significant for purposes of this study are those in Part 2 entitled "Frequency Allocations and Radio Treaty Matters; General Rules and

Regulations." These are the rules which contain the present Allocation Table.

The FCC Rules are very detailed and comprehensive in most instances. They have been developed in a number of ways. All, of course, are within the terms of existing radio and general law, notably the Communications Act of 1934, and the requirements of the rule-making Regulations of Subpart C, as well as section 4 of the APA quoted above.²² This is the framework within which allocation decisions are made.

(3) *Adjudication*

Whereas rule-making is general in applicability and looks to the future, adjudication is particularized and operates on past or existing facts.²³ The significance of the distinction resides in the constitutional right (or its absence) to a trial-type hearing where private rights or obligations are involved.²⁴

The determination of which of competing applicants will be awarded a particular frequency involves particularized applicability, *i.e.*, is concerned with the applicants for the particular frequency in issue and not all applicants for any frequency. Moreover, the determination is based in substantial part upon past and present facts, *e.g.*, the extent of local participation and broadcast experience.²⁵

For "due process" to attach, however, with its attendant judicialized notice and hearing requirements, more is required than that adjudication rather than rule-making be involved. As it has ordinarily been phrased, archaic though it sounds, a "right" rather than a "privilege" must be in question.²⁶ Traditionally, a license has been considered to be in the nature of a privilege.²⁷ Thus, though a person be affected in his particularized personal interest and past or present facts form the basis of the decision, whether his "due process" rights are involved so as to require a judicial type of notice and hearing where a license is involved has been a source of great controversy and lack of clarity.²⁸

As noted above, the award of a particular frequency to a particular applicant is accomplished by the FCC through a licensing procedure.²⁹

22. MACQUIVEY, note 17, at 190.

23. DICKINSON, *ADMINISTRATIVE JUSTICE AND THE SUPREMACY OF LAW* 21 (1927).

24. See generally, FORKOSCH, *ADMINISTRATIVE LAW* 143-76 (1956). See, *e.g.*, *Schwartz v. Board of Examiners*, 353 U.S. 232 (1957).

25. See generally, *Philadelphia Co. v. SEC*, 175 F.2d 808, 816-17 (D.C. Cir. 1948).

26. See BURRUS, note 16, at 50.

27. 3 ANTIEAU, *MUNICIPAL CORPORATION LAW* 635-714 (1958).

28. See Davis, *The Requirement of Opportunity to be Heard in the Administrative Process*, 51 *YALE L.J.* 1093 (1942).

29. See generally, EDELMAN, *THE LICENSING OF RADIO SERVICES IN THE UNITED STATES*, 1927 to 1947 (1950).

The result is that constitutionally there is serious question whether a due process right to notice and hearing is involved.³⁰

That constitutional hearing requirements may not obtain in the licensing of radio frequencies, however, does not mean that applicants are without any procedural rights with respect to notice and hearing. The APA includes licensing within adjudication for purposes of the applicability of the Act. Thus section 2(d) provides:

“Order” means the whole or any part of the final disposition (whether affirmative, negative, injunctive, or declaratory in form) of any agency in any matter other than rule making *but including* licensing. “Adjudication” means agency process for the formulation of an order. [Emphasis supplied.]

The result is that the formal hearing requirements provided by sections 5, 7, 8 and 11 apply to the assignments of frequencies to competing applicants.

Section 5 of the Act provides that in “every case of adjudication required by statute to be determined on the record after opportunity for an agency hearing” (the FCC statute so provides), the hearing must be in accordance with the provisions of sections 5, 7, 8, and 11.³¹ Section 5(a) requires notice to all interested parties. The notice is to include “(1) the time, place, and nature thereof; (2) the legal authority and jurisdiction under which the hearing is to be held; and (3) the matters of fact and law asserted.” Section 5(b) requires that interested parties be given opportunity to present facts and arguments to the extent that the nature of the proceeding and the public interest permit.

Section 5(c) provides for separation of functions in the hearing procedure. Justice Jackson of the Supreme Court has said that this was the fundamental purpose of the Act, and the principal guarantee afforded thereby to private parties. As he stated in *Wong Yang Sung v. McGrath*:

The Administrative Procedure Act did not go so far as to require a complete separation of investigating and prosecuting functions from adjudicating functions. But that the safeguards it set up were intended to ameliorate the evil from the commingling of functions as exemplified here is beyond doubt.³²

Thus, the section requires that “no officer shall consult any person or party on any fact in issue unless upon notice and opportunity for all parties to participate” (ex parte prohibition) and that “no officer . . . engaged in the performance of investigative or prosecuting functions for

30. DAVIS, ADMINISTRATIVE LAW 139-42 (1959).

31. If rule-making is required to be based upon the record after hearing, sections 7 and 8 apply to it as well. See APA Section 4(b).

32. 339 U.S. 33 (1950).

any agency in any case shall . . . participate or advise in the decision . . .” (internal separation of functions).

Section 7 details the hearing procedure, particularly requiring that they be “conducted in an impartial manner”³³ and that decisions be based exclusively upon the record taken.³⁴

Section 8 provides that decisions shall be made after the evidence is taken, and that prior to any “recommended, initial, or tentative decision” the parties shall be afforded a reasonable opportunity to submit for the consideration of the officers participating in such decisions “(1) proposed findings and conclusions, or (2) exceptions to the decisions or recommended decisions . . . or to tentative agency decisions, and (3) supporting reasons for such exceptions or proposed findings or conclusions.”³⁵

Section 11 provides for the independence of the hearing examiners (the judges of the administrative hearings) and details the procedures for their appointment, salary, assignment of cases, *etc.* Finally, section 10 provides for judicial review of final agency action, except so far as statutes preclude review or agency action is by law committed to agency discretion. Agency action may be set aside if it is found by the reviewing court to be arbitrary, capricious, an abuse of discretion or not in accordance with law; if it is “without observance of procedure required by law”; or is unsupported by substantial evidence, considering the whole record.

In addition to the requirements of the APA, the Communications Act of 1934, as amended, as well as the FCC Rules and Regulations promulgated pursuant thereto, contain many provisions with respect to the hearing procedures by which assignment decisions are to be made. The starting point is section 303 of the Act of 1934, as quoted above, *i.e.*, where the “public convenience, interest, or necessity requires,” the Commission shall “assign frequencies for each individual station and determine the power which each station shall use and the time during which it may operate.” Assignments are accomplished by a licensing procedure. Section 307(a) provides: “The Commission, if public convenience, interest or necessity will be served thereby, subject to the limitations of this Act, shall grant to any applicant therefor a station license provided for by this Act.” Sections 307 through 314 then prescribe, in rather general terms, the terms of the licenses (307), conditions in licenses for foreign communications (308), action upon applications and the form of and conditions attached to licenses (309), special requirements with respect to certain types of applications in broadcasting (311), administrative sanctions (313), application of the antitrust laws (313), and preservation of competition in commerce (314). Sections 401 through 416 contain the pro-

33. Section 7(a).

34. Section 7(d).

35. Section 8(b).

cedural and administrative provisions by which Commission action is taken and enforced, and by which it may be contested.

As will be readily observed, the statutory provisions with respect to licensing procedures whereby particular assignments are accomplished are rather broad. Particularly is this true of the statutory standard by which the award and renewal of such licenses is governed, *i.e.*, "public convenience, interest or necessity." As noted above,³⁶ the Supreme Court, nevertheless, upheld the standard in 1933:

This criterion is not to be interpreted as setting up a standard so indefinite as to confer an unlimited power. . . . The requirement is to be interpreted by its context, by the nature of radio transmission and reception, by the scope, character and quality of services.³⁷

A later decision stated that the "criterion is as concrete as the complicated factors for judgment in such a field [technically complicated and constantly changing] of delegated authority permit."³⁸

And, of course, the generality of the statute has been made more concrete by the enactment of various FCC Rules and Regulations. These are too detailed to reproduce herein. The pertinent sections include the following: Sections 0.441-0.453 (applications), sections 1.1-1.1119 (general rules of practice and procedure), and sections 2.100-2.603 (frequency allocations and radio treaty matters). These rules, which govern the procedures whereby licensing decisions are made, are in general closely modeled upon the APA requirements governing adjudication, but in some instances reflect stricter legislative requirements relative to internal separation of functions in the FCC. Thus, the "Second McFarland Bill," which became law on July 16, 1952, requires the following:

The Commission shall establish a special staff of employees, hereinafter in this Act referred to as the "review staff," which shall consist of such legal engineering . . . accounting and other personnel as the Commission deems necessary. The review staff shall be directly responsible to the Commission and shall not be made a part of any bureau or divisional organization of the Commission. Its work shall not be supervised or directed by any employee of the Commission other than a member of the review staff whom the Commission may designate as the head of such staff. The review staff shall perform no duties or functions other than to assist the Commission, in cases of adjudication (as defined in the Administrative Procedure Act) which

36. Quotation in text at note 18.

37. *Federal Radio Commission v. Nelson Bros. Co.*, 289 U.S. 266, 285 (1933).

38 *FCC v. Pottsville Broadcasting Co.*, 309 U.S. 134, 138 (1940).

have been designated for hearing, by preparing a summary of the evidence presented at any such hearing, but preparing, after an initial decision but prior to oral argument, a compilation of the facts material to the exceptions and replies thereto filed by the parties, and by preparing for the Commission or any member or members thereof, without recommendations and in accordance with specific directions from the Commission or such member or members, memoranda, opinions, decisions, and orders³⁹

It can therefore be seen that in accordance with the statutory mandates of both the FCC and APA Acts, assignment to particular applicants is accomplished by a judicialized procedure including notice, oral hearing, right of counsel, right of confrontation, a decision upon the record, decision by an impartial tribunal, and right of appeal.

(4) *Comparative Hearings*

Though characterized by well-defined procedures and guarantees with respect to both rule-making and adjudication, the allocation and assignment of radio frequencies to civilian users is not without its problem areas. The prime example involves the "comparative hearing" which the FCC employs to adjudge competitive applications in broadcasting, *i.e.*, two or more applicants for the same frequency.⁴⁰ In such event, the Commission utilizes *one* hearing at which each of the applicants makes its respective arguments as to why it, rather than the others, should be granted the license. On its face, the consolidated "comparative hearing" would appear to be the most equitable and expeditious means of making the decision. All the parties are before the Commission at one time, affording a ready basis for ascertaining the relative merits and demerits of each, one with respect to the other.

The problem arises, however, with respect to the question of what standard or standards the Commission will use to judge the applicants. The most satisfactory process of judgment would appear to require some objective standard to which the applicants may address their arguments and according to which a decision may be made. In the absence of such standard, a hearing could become a meaningless elevation of form over substance from the point of view of the applicants, and eventuate in an exercise of unbridled discretion on the part of the agency involved.⁴¹

As noted above, the statutory standard to govern the Commission in so adjudging between competing applicants is the "public convenience, interest, or necessity." Though upheld by the Supreme Court as being as

39. 66 STAT. 713.

40. See generally, EDELMAN, note 29 at 59-140.

41. See Schwartz, note 9 at 779.

“concrete as the complicated factors for judgment in such a field of delegated authority permit,”⁴² the standard is obviously quite vague. As stated by one commentator, it is in fact no standard at all, but is rather like saying to the Commission, “Here is a problem, deal with it.”⁴³

Over the years, the Commission has added substance to the general standard by developing certain criteria to assist it in determining which, if any, application is in the public interest. Some of the most important comparative criteria are: (1) A preference for local ownership on the theory that the local owner will have greater insight into local needs and is more likely to obtain civic participation in programming. (2) A preference for civil participation of the applicant and its principals on much the same grounds. (3) As a lesser factor, a preference for diversification in the occupational background of principals on the theory that this may produce more balanced programming. (4) Broadcast experience of the applicant or its principals. Good prior performance in broadcasting is viewed as giving promise of good future performance. (5) A preference for integration of ownership with management on the theory that this tends to assure effective action in carrying out program proposals. It is particularly significant when owner-managers have had prior broadcast experience. (6) The quality of program proposals, with a strong preference for “balanced programming” (*i.e.*, allotting a portion of the program time to different types of programs, such as religion, agricultural, entertainment, education, *etc.*) and for “local live” programs (those on which local talent perform, discuss, or participate with simultaneous telecast). (7) The relative quality of proposed staff, studios, equipment and similar factors. (8) A preference for applicants not affiliated with other media of mass communications. Although this factor has a monopoly aspect, it is viewed primarily as promoting the widest possible dissemination of information from diverse sources; like the other factors, it is a comparative and not a disqualifying factor.⁴⁴

With these criteria to refine the statutory standard, on the basis of which decisions are to be made, applicants address themselves in their briefs and arguments to each criterion as promulgated. Similarly, Commission decisions discuss them at great length prior to stating a result which purports to be based on a weighing of the debits and credits accumulated by each of the applicants.

Unsuccessful applicants have often asserted that some of the criteria are irrelevant or were improperly weighted in a given case, but the courts have been reluctant to upset the Commission’s application of the public interest standard.⁴⁵ In recent years, however, it has been frequently

42. Note 38.

43. DAVIS, *ADMINISTRATIVE LAW* 46 (1951).

44. GELLHORN & BYSE, *PROBLEMS: ADMINISTRATIVE LAW* 2 (1960).

45. See Jaffe, *The Scandal in TV Licensing*, 215 *Harper’s Mag.* 77, 84 (Sept. 1958).

asserted that the Commission does not apply its criteria in a rational fashion but instead resolves issues by "hunch, snap judgment, or call it what you may."⁴⁶ The Hoover Commission Report, from which the above quotation is excerpted, also states:

Not a single person at the Commission who is concerned with broadcast work will even pretend to demonstrate that the Commission's decision in these cases have followed a consistent policy or, for that matter, any other policy than the desire to dispose of cases and, if possible, to do so by making grants.⁴⁷

One lawyer has stated that "comparative cases are resolved through an arbitrary set of criteria whose application, if one judges from history, is shaped to suit the cases of the moment."⁴⁸ And a dissenting judge has protested against the Commission's "employing shifting emphasis of comparative criteria obliterating any predictable pattern of decision."⁴⁹

On the other hand, it has been stoutly maintained that the finger cannot rightly be pointed at the Commission alone. For the FCC has been given precious little guidance by the Congress, which has deliberately avoided spelling out meaningful standards even though apprised of the dissatisfaction with the Commission's application of the guidelines which it has worked out.⁵⁰

Thus, though the APA, the Communications Act of 1934, as amended, and the FCC Rules and Regulations carefully delineate guarantees of a fair, open hearing to the various applicants for the limited frequency space, problems remain. It is noteworthy, however, that these problems are not in the area of fair procedure, but rather in the Commission's attempt to create and then to apply substantive standards in deciding the merits of cases.

B. Allocation and Assignment to Federal Government Users

(1) In General

As shown in Part I, FCC jurisdiction over the allocation and assignment of radio spectrum space does not extend to Federal Government users. Section 305 of the Communications Act of 1934, as amended, confers authority in this latter regard upon the President. The President, in turn, has by Executive Order delegated this responsibility to various

46. Commission on Organization of the Executive Branch of the Government, Committee on Independent Regulatory Commissions, Staff Report on the Federal Communications Commission II-40 (1948).

47. *Id.*

48. Report, Ad Hoc Advisory Committee on Allocation to the Senate Committee on Interstate and Foreign Commerce, 85th Cong., Sess. 9 (1958).

49. *Beachview Broadcasting Corp. v. FCC*, 262 F.2d 688 (D.C. Cir. 1959).

50. See Friendly, *The Federal Administrative Agencies: The Need for Better Definitions of Standards*, 75 HARV. L.R. 863, 1055, 1263 (1962).

executive officers. At present, by Executive Order 10995, the President's function under section 305 is reposed in the Office of Emergency Planning. By virtue of the same executive order, the authority has been re-delegated to the Director of Telecommunications Management. The functions to be performed by the Director, set out in section 2 of the Order, are as follows:

- (a) Coordinate telecommunications activities of the executive branch of the Government and be responsible for the formulation, after consultation with appropriate agencies, of overall policies and standards therefor. He shall promote and encourage the adoption of uniform policies and standards by agencies authorized to operate telecommunications systems. Agencies shall consult with the Director of Telecommunications Management in the development of policies and standards for the conduct of their telecommunications activities within the overall policies of the executive branch.
- (b) Develop data with regard to United States Government frequency requirements.
- (c) Contract for studies and reports related to any aspect of his responsibilities.

In performing these functions, the Director is to have the assistance of the Interdepartment Radio Advisory Committee (IRAC).

(2) IRAC

The history and present structure of IRAC were detailed in Part I. Essentially, it is a Committee composed of users of federal frequency space, whose function historically has been to accomplish voluntary coordination of radio-frequency use and the recommendation of assignments to be made by the President.⁵¹ The Amended By-Laws detail the duties and functions, organization, responsibilities of membership, IRAC substructure, meetings and procedure, voting, and related matters.

As noted in Part I, the structure and responsibilities of IRAC have changed from time to time depending upon Presidential decision as to how to achieve the purposes of section 305 of the 1934 Act. In this connection, the recent directive of the Director of Telecommunications Management under whom IRAC now functions is pertinent in describing IRAC's present organization of functions.⁵²

The directive, issued by Director of Telecommunications Management, General O'Connell, indicates, first, the present constituency of IRAC, *i.e.*, a representative from each federal department and agency using

51. MACQUIVEY, note 17 at 191.

52. Directive, Dated December 10, 1964.

frequency space. These include: Agriculture, Air Force, Army, Commerce, Federal Aviation Agency, General Services Administration, Interior, Justice, National Aeronautics & Space Administration, Navy, State, Treasury, and the U.S. Information Agency.

The functions specified for IRAC include maintaining "under continuing review the actual use of assigned frequencies by government agencies to determine whether they are still required and are being used effectively for the purpose for which they were obtained."⁵³ IRAC is also directed to

maintain, in collaboration with the FCC, continuing review of the table of frequency allocations to ensure that the division of the radio spectrum as between Federal Government and non-government [civilian] users serves the national interest; carry on joint planning for use of the spectrum on a short-term and long-term basis; recommend in the light of national security and foreign relations, allocations for government use; and maintain the government table of frequency allocations.⁵⁴

Other directives to IRAC assign to it the task of recommending, in consultation with the FCC, national objectives in the allocation and use of the radio frequency spectrum; recommending policies, criteria, technical standards, regulations, *etc.*, for acquisition and use of frequencies by Federal Government agencies; executing policies and plans on frequency management and use as directed by the Director of Telecommunications Management; developing United States government radio frequency requirements; effecting assignment of frequencies to Federal Government stations, "and [to] modify or revoke such assignments as appropriate," all subject to the approval of the Director; making technical recommendations regarding frequencies proposed for use by foreign governments in Washington; and maintaining, in collaboration with the FCC, plans for use of the spectrum in war emergency. Finally, IRAC is directed to supervise notification to the International Telecommunications Union/International Frequency Registration Board of frequency assignment to Federal Government users, designated as the coordination agency, the use of frequencies in the prescribed U.S.-Canada border zones; assist the Director of Telecommunications Management in formulating advice to the State Department regarding radio spectrum management, and assist the Director in carrying out national obligations within its field of activity.⁵⁵

Significantly, in the light of the numerous criticisms of IRAC catalogued in Part I, General O'Connell, referring to "both industry and

53. Industrial Communications Weekly News Service, January 15, 1965, p. 1.

54. *Ibid.*

55. *Id.* at 1-2.

congressional criticism" of IRAC on the basis that it operates solely in the benefit of individual agencies in their application for needed frequencies, said that he had concluded that IRAC "should be continued, should be strengthened, and should be given a specific mission assignment by the office."⁵⁶ As will be developed in Part III, however, the directive falls far short of obviating all of the objections which have been leveled at Federal Government allocation procedures.

Turning now to the specific assignment practices in the Federal Government sector, attention must again be directed to the IRAC By-Laws. Specifically, Article X of the By-Laws states, ". . . any rules adopted by the Committee shall be codified under the title 'Code of Administrative Procedures,' which shall be maintained by the executive secretary." The Frequency Assignment Subcommittee of the IRAC (Article VII) also has a body of procedures which have been compiled in a rather informal manner but are frequently employed for reference purposes during committee discussions. These procedures "have been accumulated from the minutes and records of past actions by the IRAC and FAS."⁵⁷

Once a federal agency has determined to its own satisfaction that it needs a new or additional assignment and has selected the frequency it wishes to use and has cleared the frequency both within the agency and with other Federal Government users (though assigned, many frequencies remain unused), it makes application to the Frequency Assignment Division (FAD) of IRAC. The application is then checked for accuracy and completeness and sent on to the Frequency Assignment Subcommittee (FAS) for consideration at its monthly meeting. If decision is impossible within the Subcommittee, *e.g.*, because of objection of the FAS representative of another Federal Government agency, the item is referred to IRAC. If the matter cannot be resolved by IRAC, it is referred to the Director of the Office of Telecommunications for guidance. This procedure, whereby representatives of Federal Government agencies which use the frequency space decide among themselves on the distribution of available frequencies, is in sharp contrast to the public hearings and justification procedures of civilian applicants before the FCC.

Particularly significant with regard to frequency management are such items as the requirements for application justification. As described by one commentator:

The requirements are quite broad and detailed, but in practice when an application is being considered by the Subcommittee, the requirement is assumed to be justified unless questioned by a member of the Subcommittee. Especially the justification is questioned when the application related to a frequency use

56. *Id.* at 1.

57. MACQUIVEY, note 17, at 192.

which does not fit in with established past practice. An example might be an application for an assignment to a military Government agency in a band normally used only by non-Military Government services.⁵⁸

The specifics of assignment terms and assignment review were described by the same author as follows:

Assignment terms. Methods of preparing applications are covered in the FAS procedures. Also included are coordination procedures with other countries and details relating to the provisions of different kinds of authorizations. These latter are usually indicated in the list of authorizations by means of coded designators. Provisions for and extent of coordination with the FCC are covered in the procedures.

There are a number of procedures in the FAS compilation which relate to the manner in which frequency assignments will be listed in the records of the committee and in the Executive Order (E. O.) formally assigning frequencies to Federal Government agencies. The date at which assignments are made by the FAS is recorded in the records in a manner somewhat similar to that for recording dates in the International Frequency Lists published by the International Telecommunication Union (ITU). In the "E.O." only one date is recorded—that at which the assignment is made.

Although an early assignment date may be used as one of a number of arguments in the establishment of priority to use a frequency in the event of interference, it is of value principally as a key to the record of coordination as evidenced in the minutes of the committee and, if these records are not adequate, further reference to records of coordination within each agency concerned.

If an agency experiences interferences on one of its assignments, it may refer back to this coordination record to see what statements were made at that time concerning operations in being or planned by other agencies. If the interfering operation was not mentioned at that time, then it is presumed that the agency responsible for the more recent operation would make the necessary adjustments to clear the interference.

Most fixed-service operations are assigned with specific identification of the transmitting and receiving locations. There is, however, provision for assignment of 'group' operations involv-

58. *Ibid.* MACQUIVEY, note 17, at 192.

ing rather extensive low-power assignments not likely to cause interference at great distances. These include military assignments for tactical and training purposes that are made in a rather general nature to permit the maximum flexibility in actual operation. When 'group' assignments are made the agency receiving the assignment undertakes to inform the committee of the specific fixed locations when they have been finally determined.

Assignment review. Assignments made by the FAS and the IRAC on a 'regular' basis are not subject to review under current procedures. There are, however, numerous 'temporary' assignments and, most recently, a number of 'provisional' assignments. There are also a number of 'trial' assignments. The latter (non-'regular') categories of assignments are subject to review upon termination of the assignment. 'Temporary' assignments are handled in much the same manner as 'regular' assignments. Each temporary assignment that expires may be extended either as a temporary or regular assignment upon decision of the committee based on the same kinds of factors as those affecting the assignment initially. Provisional assignments are made to certain fixed operations in the appropriate frequency bands between 4 and 27.5 megacycles. They are made for a period of six months. They become regular assignments upon activation of the actual circuit.

If the circuit fixed is not activated within a six-months period, then the committee reviews the need for the assignment and may cancel or extend the authorization. Trial assignments are made for a period of time estimated to be required, usually one, three or six months. At the expiration of the trial period, or upon the initiation of either of the agencies involved, the assignment may be converted to a regular basis if the trial is satisfactory. Determination of whether the trial has been satisfactory or not is up to the agencies concerned and is based upon the nature and extent of use of the operation during the trial period.⁵⁹

Thus, whereas the FCC assigns radio frequencies to civilian users by means of a licensing operation for a limited period, IRAC makes some frequency assignments to Federal Government agencies for an indefinite period, others for a definite temporary period and still others for a trial or provisional period which automatically becomes authorized for an indefinite period upon the taking of certain actions by the immediate agencies concerned.⁶⁰ While civilian applicants must justify their appli-

59. *Id.* at 192-95.

60. *Id.* at 196.

cation in accordance with the "public interest, convenience and necessity" and the various criteria established by FCC rule or regulation in an open hearing in which other users may voice their opinions on whether the license should be issued, applications by Federal Government users to IRAC are assumed to be justified unless questioned by a member of FAS, *i.e.*, a fellow Federal Government user. Whereas a comprehensive body of rules governs the FCC licensing process, and a carefully formulated body of rule-making procedures (including "notice" and "opportunity to participate" to interested parties) relates to the formulation of such rules, IRAC procedure operates rather by informal, changing, unpublished rules of practice which are really "terms of reference" rather than governing rules.⁶¹ It should be added that there has been no material change in this procedural structure in recent years despite the criticism to which it has been subjected.

(3) *Requirement Determination, Selection and Clearance in User Agencies*

As noted above, IRAC is an inter-agency committee consisting of the Federal Government users of radio spectrum space. As such it seeks to coordinate various agency and department requests for frequencies within the Federal Government allocation. The administrative process by which assignments are made by IRAC, once agency requests have been received, has just been described. The picture respecting frequency management in the Federal Government sector would not be complete, however, without some consideration of the administrative processes relating to frequency assignments within the various agencies and departments themselves.

Internal agency procedures with respect to requirements determination, selection and clearance of desired frequency space vary widely within the user agencies. Differences also exist with respect to the degree of institutionalization of the procedures employed. Thus, some agencies have very little by way of formalized guidance with respect to frequency decisions. At the other extreme is the Department of Agriculture with a comprehensive set of regulations governing the internal procedures by which requirements of the Department are determined and the means whereby selection and clearance of a new frequency or modified use of an old frequency are accomplished.⁶² Selected portions of these regulations appear in the Forest Service Manual.⁶³

The Manual elaborates the criteria for determination of frequency requirements. Based on "public interest, convenience and necessity," it elaborates criteria for determining when high-frequency networks may

61. *Id.* at 192.

62. *Id.* at 121.

63. 3 FOREST SERVICE MANUAL, Title 13, Sec. K (rev. ed. 1951).

be set up, when very-high frequency networks may be established, when radio is to be used rather than telephone (as well as other restrictions on use of radio to instances where other communication is inadequate), equipment standards, economical use, sharing, duplication, group assignment of frequencies, how application for frequencies shall be made, allocation of frequencies to regions, and restrictions on the power output of transmitters.⁶⁴

In addition to the requirements in the Manual, the engineer in charge of the Forest Service Communications Organization makes periodic visits to each regional headquarters and many sub-regional offices. On these visits he assists the local officers in preparing their communications plans and in reviewing those which already have been made, from the standpoint of justification and budget limitations.⁶⁵ If a new "requirement" is necessary, review is made of existing assignments to the Department of Agriculture to determine whether any of them can be shared effectively. If not, then possible frequencies may be selected from the E.O. (Federal Government) or the FCC Frequency List (if to be shared with civilian users) within the desired band and taking into account other listings on the same or adjacent frequencies. A telephone call to the agencies concerned will then indicate any obvious conflicts. If these hurdles are cleared, an application to the Frequency Assignment Subcommittee (FAS) or IRAC for assignment of the frequency desired is prepared.⁶⁶

Most of the criteria used in other agencies in making requirements determinations may be compared in varying degrees with that used in the Department of Agriculture. In most instances a large amount of local freedom is allowed in determination of when a radio frequency is needed. The decision lies almost entirely with the field commanders in the military services.⁶⁷

In the Civil Aeronautics Administration, frequency requirement determinations may originate in one of two ways. Inasmuch as the CAA has undertaken to engineer frequency assignments for all radio aids to air navigation, the indication of need to use a radio frequency for such an aid by some other agency, *e.g.*, the Air Force or Navy, would, of course, originate with that agency. The other general source of stated frequency requirements originates with non-government airlines and airline operating agencies. Since navigation aids must conform to various aeronautical regulations, those who wish to install such aids must come to the CAA for assistance in determining what frequencies would be assigned.

64. MACQUIVEY, note 17, at 149.

65. *Id.* at 129-30.

66. *Id.* at 170.

67. *Id.* at 149.

The CAA itself is not in a position seriously to question the navigational air requirements presented to it, except for those of its own stations.⁶⁸

With the exceptions noted above, federal agencies and departments have very little by way of formal criteria for determination of radio-frequency requirements. As summarized by one commentator:

Each endeavors to fill any requirement received from the field for which men, money and equipment are available as authorized by Congress through legislative and appropriations authority.⁶⁹

In addition to the determination of requirements, individual agencies must be concerned with selection and clearance of a new frequency or modified use of an old one. In this connection, each agency maintains for itself lists of assignments and records of frequency usage of primary interest. In most instances, however, these lists contain only frequency *assignments*, not frequency *usage*.⁷⁰

These lists, as well as general lists such as the Radio Frequency Record published by the International Telecommunication Union, the list of Frequency Assignments to Federal Government Radio Stations and Classes of Stations prepared by IRAC, and the list of licenses issued by the FCC, comprise the tools used by the frequency assignment engineers within each agency in making a selection of a frequency to comport with new requirements. Because all the information is not available to all such engineers, however, it is necessary for each to coordinate his plans with those others likely to be affected. Most of the coordination is done by telephone or in informal meetings of the engineers concerned. It is all, however, formally confirmed in the regular monthly meetings of the Frequency Assignment Subcommittee or IRAC. Discussion in the IRAC may also be required in the event of unresolved controversy or if the proposed frequency use raises policy questions affecting future plans.⁷¹

C. *Coordination between Federal Government and Civilian Use*

Both the FCC and the IRAC employ the same frequency allocation table. It is based on the International Allocation Table but with refinements within specific services and suballocation of certain bands between Federal Government and civilian services.⁷² From this common background, the two agencies assign frequencies to civilian and Federal Government stations. Inasmuch as the available space is limited and two separate agencies are making assignments from it, coordination is imperative if the public interest is to be achieved.

68. *Id.* at 134-139.

69. *Id.* at 150.

70. *Id.* at 181.

71. *Id.* at 182.

72. MACQUIVEY, note 17, at 196.

Notable in regard to the coordination process which has been worked out between the two agencies is an ACC/IRAC coordination agreement approved by the IRAC on October 3, 1940. The agreement was reconfirmed on November 5, 1953. It provides as follows:

The Interdepartment Radio Advisory Committee will cooperate with the Federal Communications Commission in giving notice of all proposed actions which would tend to cause interference to non-Government [civilian] station operation, and the Federal Communications Commission will cooperate with the Interdepartment Radio Advisory Committee in giving notice of all proposed actions which would tend to cause interference to Federal Government station operation. Such notification will be given in time for the other agency to comment prior to final action. Final action by either agency will not, however, require approval by the other agency.

The two agencies will maintain up-to-date lists of their respective authorized transmitting frequency assignments.⁷³

The current practice with respect to coordination of assignment activities between IRAC and the FCC is described in a Memorandum from the Director of Telecommunications Management, Frequency Management Division, dated March 24, 1964. Interestingly, the memorandum concludes:

The dual Presidential/FCC authority over the use of the radio frequency spectrum would seem to invite confusion, inefficiency and interference. However, years of close working relationship between the IRAC and FCC Liaison Representative to the IRAC have made it the rule to avoid trouble and to put the United States in the lead in the preparation for and work in international telecommunication conferences.

That open war does not exist between the FCC and IRAC, however, does not suggest that there exists a coordinated system of frequency allocation and assignment which is in the public interest. In this connection, the colloquy between Representative Moss and then FCC Chairman Doerfer, reprinted in Part I,⁷⁴ at the 1959 Hearings, will be recalled. In effect, Mr. Doerfer admitted that the FCC gave up civilian allocations to Federal Government agencies "just on the mere representation that . . . (the FCC) should do it," since no hearings or justifications were required to demonstrate paramount need in the Federal Government agency requesting the frequency change.⁷⁵ More will be said about this in Part III.

73. Quoted in *MACQUIVEY*, note 17, at 196-97.

74. P. 68.

75. Part I, pp. 60-62.

As has been stated previously, both the FCC and the IRAC use the same Allocation Table. The Table is divided between the Federal Government allocations, allocations to civilian users, and shared-use allocations. Occasionally, of course, as needs have changed, the Table has had to be altered accordingly. The major changes since the Atlantic City Radio Conference of 1947, occurred in 1958 and 1961. The reasons for these changes, as well as the manner in which IRAC and the FCC worked together to accomplish them, described in a memorandum from the Director of Telecommunications Management, Frequency Management Division, dated May 15, 1964, are not of immediate relevance to our present discussion.

III. EVALUATION OF PRESENT SYSTEM IN TERMS OF THE PUBLIC INTEREST

The purpose of this Part is to evaluate the dual system of allocation management described in Parts I and II. With the growing shortage of spectrum space created by increasing demands upon a finite natural resource, it is imperative that the management scheme be so structured as to accomplish the most efficient, effective and equitable system of distribution and control of frequencies as can be accomplished in the public interest. The current system falls far short of achieving this objective.

As has been shown, government management of allocation and assignment practices is presently bifurcated. The Federal Communications Commission (FCC) is charged with the responsibility for the assignment and regulation of frequencies utilized by civilian users, whereas the President is responsible for the allocation of frequencies to Federal Government users. This latter responsibility the President has delegated to the Director of Telecommunications Management with the assistance of the Interdepartment Radio Advisory Committee (IRAC).¹

The deficiencies which inhere in the present system of dual management and control may be summarized as follows:

(1) Dual control by its very nature generates difficulties with respect to allocation and assignment of limited frequency space in the public interest.

(2) The practices for determining when an assignment will be made within the two spheres, Federal Government and civilian use, differ widely. Suspicion and mistrust are inevitable when civilian users are subject to strict FCC justification procedures while lack of true justification procedures or objective determinations of need prevail with respect to Federal Government allocations under IRAC procedures. These easier

1. Text as note 1, Part II. The prior situation was described in detail in Part I.

procedures of IRAC mean that more Federal Government assignments are made than if an objective analysis of asserted need had been made, which in turn puts greater pressure upon civilian uses.

(3) While the absence of centralized control under the present system could, theoretically at least, result in frequency wars, with both the FCC and IRAC assigning the same frequency to a civilian and Federal Governmental user respectively, in actuality this is avoided, but only because there is submergence of the public interest in civilian use to that of the Federal Government use, accomplished through FCC subservience to demands by Federal Government users.

(4) The combination of factors (2) and (3) above means that a basically unevaluated, asserted Federal Governmental need is served to the detriment of civilian use and public interest. This is in consequence of the lack of real evaluation of the asserted Federal Government need and the lack of a comparative evaluation, in the public interest, between the asserted Federal Government need and the civilian need.

(5) To these deficiencies must be added the general lack of meaningful, long-range planning in the use of the spectrum.

These deficiencies will now be considered in turn.

It is evident that for a dual system of management and control to work effectively, there must be a procedure for coordination of efforts and resolution of conflicts. It is noteworthy that there is no statutory directive with respect to coordination between the Federal Government and civilian spheres. As shown in Part I, the Communications Act confers authority for regulation and control of the radio spectrum upon the FCC, and then in sections 305 and 606 excepts assignments to Federal Government users. This latter responsibility is, by these sections, placed in the President.

Neither is there any Presidential guidance respecting coordination of FCC and IRAC management activities. Executive Order 10995 delegates Presidential authority for assignments in the Federal Government sphere to the Director of Telecommunications Management with the assistance of IRAC. Neither the Director nor IRAC, however, is directed to coordinate its activities with FCC management in the civilian sphere, nor is there suggested any scheme for the resolution of conflicts. In fact, the FCC is mentioned only three times in the Order: *i.e.*, in sections 3(b), 7 and 8. Section 3(b), after conferring authority upon the Director with respect to foreign radio stations, provides: "Authorization for the construction and operation of a radio station pursuant to this subsection and the assignment of a frequency for its use shall be made only upon recommendation of the Secretary of State and after consultation with the Attorney General and the Chairman of the Federal Communications

Commission." Section 7 provides, "Nothing contained in this order shall be deemed to impair any existing authority or jurisdiction of the Federal Communications Commission." Finally, section 8 provides, "The Director of Telecommunications Management and the Federal Communications Commission shall assist and give policy advice to the Department of State in the discharge of its functions in the field of international telecommunications policies, positions and negotiations." Thus, with the exception of Federal Government radio stations at the seat of government and international telecommunications generally, there is neither legislative nor executive direction with respect to coordinated efforts in the allocation and assignment of frequencies by the FCC and IRAC.

Necessity, of course, has dictated some degree of coordination between the FCC and IRAC. There is only one spectrum; the same frequency cannot be used at the same time by a civilian and a Federal Government user. In this respect, the FCC/IRAC coordination agreement of October 3, 1940 (reconfirmed on November 5, 1953) is significant. As earlier noted,² it requires the two organizations to notify each other of proposed actions which might cause "interference," so that each might make comments to the other prior to final action, but it also specifically states that "Final action by either agency will not, however, require approval by the other agency."

The specifics of the informal coordination procedures worked out by the two agencies is described in a memorandum from the Director of Telecommunications Management, Frequency Management Division, dated March 24, 1964. Essentially, the coordination procedure consists of FCC appointment of one of its members as Liaison Representative to IRAC, exchange by the FCC and IRAC of applications by civilian and Federal Government users or applicants respectively, and meetings between the two agencies to work out any conflicts between civilian and Federal Government usage. The memorandum concludes:

The dual Presidential/FCC authority over the use of the radio frequency spectrum would seem to invite confusion, inefficiency and interference. However, years of close working relationship between the IRAC and FCC Liaison Representative to the IRAC have made it the rule to avoid trouble and to put the United States in the lead in the preparation for and work in international telecommunication conferences.

That "trouble" has been avoided, however, is not to suggest that the most efficient, effective and equitable system of distribution and control of frequencies has been accomplished in the public interest. Moreover, while "trouble" has been avoided in the sense that no complete

2. Quoted in MACQUIVEY, FREQUENCY ASSIGNMENT ADMINISTRATIVE CONTROL 196-97 (1956).

breakdown has occurred in frequency assignments between Federal Government and civilian use, this does not signify the absence of friction or difficulty in frequency assignment and related activities. As has been shown, there is presently no formalized procedure for the resolution of competing frequency demands of civilian and Federal Government users. Indeed, not only is there no one person or agency with overriding authority to assess competing demands between the two spheres and make such award as the public interest dictates, there are not even legislative or executive standards or directions to be employed by the FCC and IRAC in resolving conflicts with respect to competing applicants. As concluded in the 1960 Report of the Library of Congress for then-Senator Lyndon Johnson's Committee on Aeronautical and Space Sciences:

With respect to national policy, none has yet been formulated and adopted which clarifies the dual control of the radio frequency spectrum by the FCC and the IRAC . . . no criteria have been established between the conflicting needs of [Federal] government and non-government [civilian] users Just as the United States lacks a clear policy for dividing the spectrum among its own users, so it lacks a policy for guidance in preparing the national position for international negotiations.³

The result of this is that "allocations . . . (are) made by officials who . . . (can) not weigh all demands for spectrum space, [Federal] government and private (civilian) and judge them impartially on the basis of full explanation according to a single set of standards and a well-considered policy."⁴ The FCC allocates and regulates within the civilian sphere. IRAC services frequency demands by Federal Government users. In the event of civilian and Federal Government application for the same space, the two agencies merely work it out among themselves by means of the informal procedures described above. In other words, instead of having a management structure which assigns the available supply of frequencies among all claimants in accordance with a judgment as to how best the public interest might be served, the claims of Federal Government use are "negotiated" between the President's designated agent and the FCC rather than subjected to comparative examination with other competing users in an effort to determine wherein lies the public interest.

Not only is there no objective analysis and decision concerning the competing demands of Federal Government and civilian users, but the

3. Quoting Loeber's, *Regulations and Administration of Telecommunications in the United States* (p. 92 of the Report).

4. President's Communications Policy Board, *Report* (1951).

two users operate "under different ground rules." As stated by Mr. Fellows of the National Association of Broadcasters in the 1959 Hearings on Spectrum Allocation:

The basic problem, here, lies in the fact that there are two users of vital spectrum space—[Federal] Government and non-Government [civilian]—with each of them operating under different ground rules.

The non-Government [civilian] users of the spectrum must justify to the Federal Communications Commission in public proceedings their need for and utilization of the portions of the spectrum which may be allocated to their particular services.

.....

However, although the non-Government civilian users present information of use and justification for what they request in the spectrum, similiar information is not submitted with respect to the [Federal] Government use of the spectrum which might indicate how the entire natural resource could best be utilized. The [Federal] Government users are not required to justify before Congress, public opinion, or any impartial body, their use of frequencies.⁵

If a Federal Government agency need not justify its demand to anyone (not even to IRAC), no assessment may be made as to whether the public interest would best be served by assignment to the Federal Government applicant rather than a prospective civilian user, *even assuming*, contrary to fact, that there existed an assessment procedure.

That suspicion and mistrust are bound to result from the fact that the FCC and IRAC use different ground rules for deciding upon allocation and assignment requests is indicated in the following statement by Dr. Irving Stewart, who had been Chairman of the President's Communications Policy Board:

In other words, Mr. Chairman, this situation is one which is made to order for suspicion, and there is every reason to believe that the suspicion does exist. Every service [Federal] Government or non-Government [civilian] is convinced of the importance of its mission.

It is natural for each [Federal] Government department to emphasize the importance of its role; and there isn't inherent in the situation any necessary motivation to conserve frequencies in order that they might be available for non-Government [civilian] use. In many cases in the assignment of frequencies,

5. Hearings, Subcommittee of the Committee on Interstate and Foreign Commerce of the House of Representatives, 86th Cong., 1st Sess., June 8, 9, 1959, p. 36.

security considerations must be taken into account, and that means that justifications for the assignments cannot be made a matter of record.

And then when you have no public record, you have another fertile ground for suspicion. Perhaps the assignment was justified but it is going to be pretty hard to convince the man who loses out that it was justified.⁶

A further consequence of the present system of dual control is that "the (Communications) Act places the Commission under no duty to respect the President's assignment; either the Commission or the President could start a radio war by assigning a frequency already in use to an interfering user."⁷ This could be the case where, under section 305, a Federal Government station is transmitting Federal Government business over its frequency.

That no such wars have actually occurred suggests no merit in the present system, however. In fact, the absence of radio wars is attributable to FCC subservience to IRAC decisions,⁸ which emphasizes the inconsistency of the present system in the service of the public interest. For if the FCC merely submits to any request by a Federal Government agency, then the informal negotiation procedures described above, whereby IRAC and the FCC "adjust" competing demands, amounts to a coordinated effort in the public interest only if it can be said that every frequency demand by a Federal Government agency is automatically more in the public interest than a request for the same frequency by a civilian applicant.

The tremendously significant contributions of civilian users, for example, in the field of experimentation in aeronautical radionavigation,⁹ render such a *a priori* conclusion impossible. The point is simply that an asserted (Federal Government) interest is not necessarily "the public interest."

That FCC subservience is, in fact, the means of "avoiding trouble" under the present system of dual control was made abundantly clear in the colloquy between Representative Moss and the then-Chairman of the FCC, Mr. Doerfer, at the 1959 Spectrum Allocation Hearings:¹⁰

The Chairman. Is it not a fact that right now OCDM has asked the Federal Communications Commission to give up

6. *Id.* at 33-35.

7. Report of the President's Communications Policy Board, note 4, at 193-94.

8. *Id.* at 194-95.

9. This was involved in the Bendix Litigation. See *Bendix Aviation Corp. v. FCC*, 272 F.2d 533 (D.C. Cir. 1959), *cert. denied sub nom. Aeronautical Radio, Inc. v. United States*, 361 U.S. 965 (1960).

10. Hearings, note 5, at 87-88.

aviation channels, 8500 megacycles, for [Federal] Government use, and the Commission has done so, solely on your statement. Is that true?

Mr. Doerfer. That is correct.

The Chairman. And also it is not a fact that on that action there is litigation pending at the moment?

Mr. Doerfer. That is right.

The Chairman. There is the example, Mr. Moss.

Mr. Doerfer. There is no litigation between the Federal Communications Commission and the Office of Civil Defense.

Mr. Moss. And the Federal Communications Commission, having great confidence in the OCDM, accommodated them?

Mr. Doerfer. On the basis that the OCDM was responsible for the national security to a much closer and greater extent than we are, and we were in position to do that with respect to that.

So that, when they indicated that they wanted that, we could not find any specific authority in the act whereby we could say no. We did the other thing.

Mr. Moss. Is there any specific authority in the act that makes that possible for them?

Mr. Doerfer. No, other than when you say "they," I have in mind the President. OCDM is asking for the President.

Mr. Moss. I think this gets to a rather important question, Mr. Chairman:

That you give up something to another [Federal] Government agency, just on the mere representation that you should do it. You have not had a hearing which would enable you to determine whether the request is a proper one or not; whether, in fact, the security of the Nation is involved. As you probably know, for 4 years I have spent some time on another committee where I have had Government witnesses say that security is involved here, and I have found that the security was so remote and nebulous that it would be almost impossible to identify it.

There is no one here on behalf of the communications agencies to say, or to determine whether or not the [Federal] Government agency is making a valid case, whether there is a com-

elling [Federal] Government requirement for the channels it has requested.

Mr. Doerfer. I think that is a correct statement.

Further, FCC subservience has been judicially sanctioned as illustrated in the *Bendix*¹¹ litigation discussed in Part I, which was the litigation referred to in the above-quoted colloquy. In that case, the FCC had turned down petitions for rehearing on a ruling that the 8500-9000 Mc/s frequency, previously a shared use for radionavigation between Federal Government and civilian, be thereafter allocated to exclusive Federal Government use for radio positioning. The petitions were denied on the ground (stated in FCC Order 58-745) that "the OCDM has informed the Commission that the granting of the requests in the various petitions for reconsideration would have a serious effect on national defense capabilities."

The Court's opinion, quoted at length in Part I, although admitting the conflict between Federal Government and "important" civilian demands and the possibilities of abuse inherent in the present management structure, nonetheless held that commission subservience was not unlawful.

We have mentioned the contrast between FCC and IRAC procedures.¹² It is helpful here to summarize these differences because the impact of these procedures upon the division of the spectrum between the two uses is very important. First, it is noteworthy that allocation and assignment of civilian frequency space is the responsibility of a bipartisan, independent agency of the Federal Government. The agency is formally created by statute and the procedures, whereby its allocation decisions are made, are well-defined in the enabling act, as well as in rules and regulations promulgated pursuant thereto, and in the Administrative Procedure Act. Through the licensing mechanism, and provisions for periodic renewal and for suspension and revocation in the event of abuse, the Commission is in a position to exercise continuing control over frequency usage in the private sphere.¹³ Further, various provisions prohibiting ex parte influence and requiring a decision on the record go a long way toward insuring a decision in the public interest.¹⁴

Second, individual applicants for frequency space are accorded the burden of establishing justification for the space requested, *i.e.*, the burden of showing that one applicant rather than another would better achieve the public interest is placed upon the applicant himself. Competing applicants then meet in an open comparative hearing in which

11. 272 F.2d 533 (D.C. Cir. 1959).

12. See Part II.

13. See Sections 307-314, 401-416 of the Communications Act of 1934.

14. *E.g.*, Administrative Procedure Act, Section 5(c).

evidence is taken from all, with each knowing the claims, promises, *etc.*, of his competitor. Upon the basis of this evidence, the Commission makes its decision as to which it thinks would best achieve the public interest, convenience and necessity.¹⁵

Third, the periodic renewal requirements and general supervisory powers of the Commission prevent a hoarding of frequencies upon the theory that they might be of some use to a licensee at a later date.

Fourth, frequency allocation and assignment by the FCC is characterized by public procedures and written opinions setting forth findings, reasons and opinions underlying decisions.¹⁶ FCC procedures do not partake of the deficiency described by Senator Long of the Senate Subcommittee on Administrative Procedure:

Too much of the public business is being conducted in virtual secrecy. . . . The public has only the most superficial knowledge of what government policy is on some vital issues, how arrived at, who is responsible for them, and other matters of comparable importance.¹⁷

Secret and publicly unjustified decisions by agencies with authority to develop basic policies affecting, or to determine allocations of, public resources are inconsistent with the public interest in curtailing opportunities for arbitrary governmental action.¹⁸ As was indicated in Part II, FCC procedure presently avoids the problem with respect to assignments in the civilian sector. Notice, hearing, confrontation, cross-examination, right to counsel, impartial tribunal, and a decision on the record—the traditional requisites of open decision-making—characterize FCC assignment practice.

This is not to suggest, of course, that no problems inhere in the assignment of frequencies to civilian users. Principal among these are the "shifting emphasis of comparative criteria"¹⁹ employed by the Commission in making decisions in comparative licensing cases and FCC subservience to requests by Federal Government agencies for contested frequency space. It is noteworthy, however, that with regard to the first problem, the difficulty is not in the area of fair procedure, but rather in the Commission's application of substantive standards in deciding the merits of cases. And, with regard to the second, the problem is not one

15. See Part II, A. (4).

16. As to the problems generally, see GELLHORN & BYSE *ADMINISTRATIVE LAW* 1073, *et seq* (1960).

17. See Report of the Committee on the Judiciary of the U.S. Senate, pursuant to S. Res. 261, 88th Cong., 2d. Sess. (1965).

18. See Hector, *Government by Anonymity, Who Writes Our Regulatory Opinions?*, 45 *AM. B.J.* 1260 (1959).

19. *Beachview Broadcasting Corp. v. FCC*, 262 F.2d 688 (D.C. Cir. 1959).

of the Commission's making, but is rather the result of the dual system of management itself without the benefit of any institutionalized procedure for guaranteeing allocation decisions in the public interest.

The four above-described characteristics of FCC assignment practice in the civilian sphere stand in marked contrast to the practice of IRAC, as supervised by the Director of Telecommunications Management, in assigning frequency space to Federal Government users.

First, in contrast to the FCC, which is an independent regulatory agency of the Federal Government, IRAC is an inter-agency committee composed of representatives of user federal agencies. As the President's Communications Policy Board observed: "The key to the matter is the nature of the group—a group of users, rather than an independent judging body [No] body of users acting as judge of its requirements can take an impartial view of the requests of its members."²⁰ Dr. Irving Stewart, who had been Chairman of the PCPB, amplified this observation in his testimony at the 1959 Hearings. Thus:

. . . But when you come to the other side of the picture, the [Federal] Government side, you have the ultimate authority in the President of the United States as Commander in Chief, and also exercising certain authority conferred in the Communications Act of 1934. Now the President of the United States, according to popular report, has other things to do than spend his full time in managing the radio side of the spectrum, the [Federal] Government side, so that tends to get pushed down.

One of the convenient devices for handling the situation that results is IRAC, the International Departmental Radio Advisory Committee to which the chairman referred earlier.

That is an extremely useful technical body, but it is a body composed of users. The situation is one in which naturally there is a desire to accommodate the wishes of the users who participate. There is nobody sitting in the position of arbiter. There is nobody who can ask too many hard questions. There is nobody who has an overriding task of requiring that the necessity for a particular new assignment be established in the light of all the assignments that have been made in the past.²¹

With no one to ask "the hard questions," the result has been a log-rolling type of operation or, as described by Mr. Fellows in the 1959 Hearings, a "see saw of determining who gets what portions, and who is using the domain efficiently."²² Finally, the testimony of Mr. Victor

20. Report of President's Communications Policy Board, note 4, at 200.

21. Hearings, note 5, at 33-35.

22. *Id.* at 36-38.

Cooley, who had been Chairman of the Special Committee on Telecommunications, is worthy of repeating in this respect:

On the other hand, on the [Federal] Government side we don't find such a thorough and business like approach to the question of assignment because there is no authoritative voice any place in the Government except the President, or the Director of the Office of Civil and Defense Mobilization acting for the President who may resolve a controversy or say how [Federal] Government frequencies shall be assigned. Now IRAC is a committee of representatives of agencies involved in the usage of radio frequencies, and they are very competent people.

They understand the use of the spectrum, but as has been pointed out, there is no one on IRAC that has any authority whatever to say that the Defense Department request shall prevail—for instance, if Defense wants something and if Commerce wants the same thing, or if some other agency is interested in the same frequency, there is no one that can say, after hearing all facts, 'This frequency should go to Defense or that frequency should go to Commerce.'

. . . .

But a lot of it has been through compromise and trading back and forth, not because any group or board with authority to handle such things has decided after full examination that this frequency should go here or this one should go there. That is the main thing that I should say, the main conclusion that our committee came to, that there should be on the [Federal] Government's side the kind of examination and study and evaluation of frequency assignments with an authoritative voice acting on behalf of the President to make these assignments that prevail on the non-Government [civilian] side.

. . . whereas the FCC decides in an authoritative evaluated way whether or not an assignment should be made to this applicant or that applicant there is no one that does that on the [Federal] Government's side. On the [Federal] Government's side if Navy, for instance, needs a particular frequency and the Air Force say they need the same frequency although they start out wanting the same frequency, they can probably by compromise decide that maybe another frequency will do for Navy or Air Force can get along with a different one.²³

It should be apparent that a procedure whereby allocation decisions are determined by "compromise," by "log-rolling," or by a "see saw" type

23. *Id.* at 49-50, 52.

of operation among the users, is far from conducive to insuring the most effective, efficient and equitable distribution of frequency space, even within the Federal Government sector.

In the second place, in contrast to the extensive and well-defined justification procedures employed by the FCC in making assignments to civilian users, no such practices persist respecting allocations in the Federal Government sphere. Without a procedure whereby applicants justify their proposed use in terms of the public interest, *i.e.*, where requests are granted upon the bare assertion of need, there is no basis for assessing comparative needs in the light of the public interest. Despite this fact, Federal Government allocations are not conditioned upon justification. As stated by Mr. Fellows in the 1959 Hearings:

However, although the non-Government [civilian] users present information of use and justification for what they request in the spectrum, similar information is not submitted with respect to the Federal Government use of the spectrum which might indicate how the entire natural resource could best be utilized. The Federal Government users are not required to justify before Congress, public opinion, or any impartial body, their use of frequencies.²⁴

To a similar effect was the statement of the President's Communications Board: "IRAC does not require sufficient justification for the assignment of frequencies, has no authority to question any [Federal] government department's statement of need for a frequency, and is not constituted to do so."²⁵

Third, in contrast to the continuing supervisory powers of the FCC over civilian licensees, no formalized control exists with respect to checking Federal Governmental usage and guarding against hoarding and non-use. The President's Communications Policy Board was especially critical of Federal Government allocation practice in this regard, commenting that IRAC contained no power to "transfer . . . frequencies when the original assignees failed to utilize them."²⁶ Congressional criticism has also been directed toward IRAC in this regard. Illustrative is the inquiry of Senator Potter on March 25, 1957, discussed in Part I.²⁷

That the fears of hoarding of frequency space against the contingency of future use is, in fact, justified is evident from the testimony of General Quesada, who was personally concerned with spectrum allocation

24. Hearings, note 5, at 36.

25. Report of President's Communications Policy Board, note 4, at 30.

26. *Id.* at 199.

27. See note 117 of Part I, and accompanying text.

on the Federal Government side for some twenty years. In the 1959 Hearings, General Quesada stated:

The problem of allocating and assigning frequencies is a very, very complex problem wherein you are dealing with vested interests and in this regard I might cite my own experience which goes back about 20 years

Now I must say to you in all sincerity that my memory searching back over the 20 years tells me that in practically every case I was subjective and not objective. I was a contestant. I hoped for a status quo, at least a status quo in respect to what I had. I often sought what somebody else had, and this is characteristic not only of me, but of practically everybody who has ever been involved in this problem. It is an occupational disease, if I may refer to it as such. It is a frailty of human nature, also.

Now it isn't uncommon for a person, and I have to say perhaps I have been guilty of this, to harbor my frequencies or to harbor an assignment of frequencies even to the point of denying data and information as to their use. It isn't uncommon to generate use when a frequency is challenged. . . .

There are 12 members of IRAC. Each member is a contestant, as is my agency (the Federal Aviation Agency)—very often a contestant with and against other members. Under those circumstances I doubt the ability of any member to be really objective. I doubt very seriously. Again if this is the case, I would attribute it to the frailties of human nature.²⁸

With the various Federal Government agencies regarding themselves as "contestants," and without any independent decision-making body to decide between contestants, the tendency to hoard against future needs when there might be a frequency shortage becomes inevitable. Once again the public interest in the most effective, efficient and equitable distribution of limited frequency space must suffer.

Finally, whereas FCC assignment practice is characterized by public decision-making with ample notice, open hearings, confrontation, cross-examination, right of counsel, an impartial tribunal and a decision on the record, the IRAC in assigning frequencies to Federal Government users follows no such practice. There are no public hearings, no rules or opinions are published, no industry or public participation is permitted, and there are no procedures for appeal. IRAC's decision-makers combine the roles of petitioner, judge and jury. Practices like these hardly accord with democratic theory.²⁹

28. Hearings, note 5, at 196-97.

29. Report of President's Communications Policy Board, note 4, at 197-200.

Secret decision-making is decision-making outside the critical scrutiny of the public view. Without this check—vital in avoiding arbitrary government—a crucial guarantee of decision-making in the public interest is lost; there is no basis or record upon which to call the decision-maker to task for an erroneous decision. The public interest in the most effective, efficient, and equitable utilization of limited frequency space must once again suffer. Furthermore, basic ideas concerning fairness to applicants are jeopardized since, “when you have no public record, you have [a] . . . fertile ground for suspicion. Perhaps the assignment was justified but it is going to be pretty hard to convince the man who loses out that it was justified.”³⁰

The importance of this fundamentally non-adversary, unanimous agreement-among-users process of assignment of frequencies among Federal Government agencies to the problem we are considering—the division of the spectrum between Federal Government and civilian users—is in its adverse effect upon the civilian user and to the public interest in having the most efficient and effective utilization of the spectrum. We have seen that when the IRAC and Director of Telecommunications Management make demands upon the FCC in “negotiations,” the FCC has uniformly given ground to claims that “national security” requires frequency allocation to Federal Government rather than civilian use.

These two factors then—relative ease in securing IRAC assignments because no searching inquiry into need is made, and FCC subservience to requests for frequencies otherwise available to civilian users—in combination mean that the total spectrum space available to the civilian user is being diminished without an objective critical analysis of the asserted Federal Government need for the frequencies at any stage. Hence, the lack of adequate procedures within the Federal Government sphere not only minimizes efficient use of the spectrum within that sphere, but results in taking from the civilian user otherwise available frequencies in order to serve a Federal Government need which is essentially unevaluated objectively in its own terms.

Even if there could be created a more effective procedure within the Federal Government by which asserted needs for frequencies by Federal Government agencies would be subjected to objective and critical evaluation to insure that there is real need and that there is full and effective use and not hoarding, the problem of comparative assessment of need with justified civilian use would remain unsolved as a result of this improvement. For while an internal Federal Government justification procedure would likely reduce the number of requests for diversion of frequencies from civilian use—some requests could be expected to be withdrawn or turned down in the internal Federal Governmental ex-

30. Hearings, note 5, at 33-35.

amination which we are supposing might be created—it would in no sense furnish a comparative evaluation of that Federal Governmental need and the competing civilian need, in order that a judgment concerning allocation of frequency in the public interest could be made.

Finally, the present system of dual control is deficient in its failure to afford the means for any coherent policy-planning with respect to allocation needs and usages in the future. As the President's Communications Policy Board commented:

There has been no long-range study of the question, no long-range planning. No agency of government is in a position to take a comprehensive view of this problem. No agency is qualified to advise the President in fields where the interests of private [civilian] and [Federal] government telecommunications users are in conflict. Meanwhile in the absence of guiding policy, the action of government agencies could seriously handicap the industry.

[D]ual control [by IRAS and FCC] has led to friction, misunderstanding, waste, and avoidance of responsibility. The organization is lacking in over-all policy guidance, and so complex that few persons understand all its ramifications.

The present telecommunications legislation and organization have failed to produce adequate direction, leadership, administration, and control and have fostered dissention between the federal government and industry. Many of these shortcomings could have been mitigated if not avoided.

Exploitation of the spectrum is not static but is fluid, increasing with the cooperation and good will of users, improvements in equipment, operating techniques, circuit discipline, need, and willingness to accept a poorer grade of service when necessary. It is not likely that the improvements derived from these measures will keep pace with the demands unless energetic steps are taken to establish an agency competent to assure the best circuit discipline, equitable allocation of frequency channels, and full use of technical developments.³¹

Yet, the fact of "scarcity of radio frequencies in relation to the steadily growing demand"³² requires just the sort of policy-planning which the present system of dual control, with each part operating under different procedures and with conflict avoided by subservience of one part to the other, does not permit.

31. Report of President's Communications Policy Board, note 4, at 46-50.

32. Statement of President Truman, quoted in Hearings, note 5, at 23.

Part IV of this study will set forth our recommendations for remedying these deficiencies of the existing system of dual control of the spectrum.

IV. RECOMMENDATIONS FOR REMEDYING DEFICIENCIES OF THE PRESENT ALLOCATION SYSTEM

The foregoing description and evaluation of the system employed to allocate frequencies between Federal Government and civilian use, so as to serve the public interest in securing the most effective utilization of the spectrum, has disclosed basic defects which are antagonistic to that public interest and urgently need corrective action.

First, there is no objective decision-making body, whether an institution or a designated individual, to determine in the overall public interest the allocation of frequencies as between these competing claims for use. Rather, there are two agencies, the FCC and the DTM-IRAC, with split responsibilities, who "negotiate" disputes over allocation, with the FCC in fact being subservient to DTM-IRAC demands for allocation of frequencies to Federal Government use.

Second, even assuming that such an objective decision-making body is established, there are no organized and meaningful procedures now in existence by which a rational decision among competing Federal Government and civilian requests for allocation may best be arrived at.

Our recommendations are designed to remedy these defects. Broadly, our first recommendation is that one institution should be given the task of determining, in the public interest, allocation of frequencies as between all competing claims for use. The second recommendation is that this be done in a manner which closely resembles the rule-making procedures of the APA and the major federal regulatory agencies. Both recommendations present certain problems of refinement and specificity primarily because of the sensitive national security aspects of frequency allocation. Problems of this kind, however, have been faced and met successfully in other contexts, and should be soluble here. First, we shall be more specific on our recommendation concerning "one institution" decision-making in allocating frequencies among all competing uses, indicating reasons for our choice among possible competing systems, and secondly, regarding the rule-making procedures which appear to be most conducive to the wisest determinations.

(1) *One Institution Decision-Making in Allocating Frequencies Among All Competing Uses*

The problem of choosing among possible repositories for the task of deciding allocations of frequencies between Federal Government and civilian use is not easy. Indeed, the fact that no solution has yet been

found to the unsatisfactory situation which has persisted for over thirty years—bifurcated control—may be due in no small part to the difficulty in deciding who should be the decision-maker in allocating frequencies among these competing uses. Proposed solutions have ranged from assigning the task to the Federal Communications Commission, to the creation of a “super-board” above the FCC and the DTM-IRAC with or without an appeal to the President, to the establishment of one “super” man above the FCC-DTM-IRAC with or without such appeal.

For various reasons, none has commanded sufficient support. The military agencies, for example, have questioned the FCC as the overall decision-maker since the FCC has been identified over the years so closely with allocation among civilian users. On the other hand, civilian users have tended to view solutions other than the FCC as decision-maker, including those involving appeals to the President by Federal Government users, with the gravest suspicion on the ground that they would give the appearance but not the substance of objective decision-making.

Certainly this kind of problem is not new. In recent years there have been two very prominent analogues, involving two different solutions. An examination of these solutions to similar problems, involving the Federal Aviation Agency and the Atomic Energy Commission, may be helpful.

A. *The Federal Aviation Agency*

The background of the Federal Aviation Act of 1958¹ bears such a strong resemblance to the frequency allocation problems which we have been investigating as to be almost eerie. The House Report on the bill which became that Act recounts the early history of airspace control in the United States:

The first basic Federal aviation statute was the Air Commerce Act of 1926. It placed responsibility for the regulation of air commerce on the Secretary of Commerce. However, it gave the President authority to make airspace reservations for national defense or other governmental purposes. It authorized the Secretary of War to designate military airways. Thus, a pattern of division of responsibility in air-safety rulemaking and the allocation of navigational airspace was established, to plague civil and military air operations down to the present time, with the Department of Defense, the Department of Commerce, the Civil Aeronautics Board, and the President having authority in this field.

As air commerce continued to grow and encounter new opera-

1. 49 U.S.C. 1341 ff. (1963) P.L. 85-726, 72 Stat. 737.

tional problems, the inadequacy of the Air Commerce Act became apparent.²

Congress responded by passing the Civil Aeronautics Act in 1938. But its administration was divided between the Civil Aeronautics Board and the Civil Aeronautics Authority, and "divided authority over airspace use forced the executive branch to resort to the committee method to solve or attempt to solve, conflicts over airspace allocations."³ In 1946, Executive Order 9781 created the Air Coordinating Committee. This Committee, the House Report continues, "which can act only by unanimous consent, came to play an important role in airspace control, and diluted further the role of"⁴ the CAA and the CAB:

Under this system, airspace has been assigned on a case-by-case basis often resulting in delays and patch-work solutions to many critical airspace problems. For example, this Committee, in its investigation of the Grand Canyon accident, found that establishment of an airway over the heavily traveled route over Grand Canyon was being delayed by objections of the military made through an Air Coordinating Committee panel.

Clearly an agency is needed now to develop a sound national policy regarding use of navigable airspace by all users—civil and military. This agency must combine under an independent administrative head functions in that field now exercised by the President, the Department of Defense, the Department of Commerce, and the Civil Aeronautics Board.⁵

What galvanized the Executive Branch and the Congress into acute realization of the need for one agency to "develop a sound national policy regarding use of navigable aerospace by all users"? As the House Report recognizes, the 1958 Federal Aviation Act was not "hastily conceived legislation." Rather,

"the magnitude and critical nature of the problem came first to general public notice, perhaps, as a result of the midair collision of two airliners over Grand Canyon on June 30, 1956, when 128 lives were lost. Following this disaster were fatal air crashes between civil and military aircraft operating under separate flight rules established in the Civil Air Regulations."⁶

On June 13, 1958, the President, following two studies made during the prior three years, submitted a message to Congress recommending

2. House Report No. 2360 to accompany S. 3880, 85th Cong., 2d Sess. 1958, 1958 U.S. Code Cong. and Adm. News 3741, 3743.

3. Note 2 at 3743.

4. *Ibid.*

5. *Id.* at 3744.

6. *Id.* at 3742.

the creation of an independent federal aviation agency (H. Doc. 406, 85th Cong., 2d Sess.). In that message, the President said:

Recent midair collisions of aircraft, occasioning tragic losses of human life, have emphasized the need for a system of air traffic management which will prevent, within the limits of human ingenuity, a recurrence of such accidents.

In this message, accordingly, I am recommending to the Congress the establishment of an aviation organization in which would be consolidated among other things all the essential management functions necessary to support the common needs of our civil and military aviation.⁷

Perhaps allocation of radio frequencies would have long since been made the task of a single agency if the defects of bifurcated control were as visibly and dramatically disastrous as Grand Canyon midair aircraft collisions.

Having decided to place in one agency the responsibility for control of all uses of the airspace, the Executive and the Congress were by no means at the end of their problem. "The question of the extent and nature of military participation in the new agency was perhaps the most difficult one faced by the Committee," the House Report avers. How was it solved? The House Report describes the process:

Integration of Department of Defense activity in the field of air traffic control into the new agency is important in the interest not only of the efficient use of air space, with its important national defense connotations, but it's urgently needed for reasons of governmental economy. (The committee was told that the Department of Defense now has approximately 18,000 persons in this work, while the Civil Aeronautics Administration employs some 17,400 persons.)

Witnesses heard by the subcommittee were in agreement that the new agency should be under the direction of a civilian administrator, who must take into consideration the needs of military aviation.

The intent of this legislation is to establish a civilian agency, under the direction of a civilian administrator.

Personnel of the agency, civilian and military alike, must be responsible solely to the Administrator.

In response to a question on this point during the hearings, Mr. Quesada said—

7. *Ibid.*

. . . The original language provides for an adviser. And as I interpret it, personnel would be assigned to the adviser, and I think that is something less than best. I do not want the military personnel in this agency to be taking instructions from the Military Establishment. I do not want them to bring the specialized interests of the Military Establishment to this agency. I want them to bring to this agency the knowledge that they have accumulated by having been in the Military Establishment. I want their loyalty to be undiluted and to the Administrator and the Administrator alone. We have, therefore, suggested this language, 'Appointment to, acceptance of, and service as Deputy Administrator, or under such cooperative agreement, shall in no way affect status, office, rank, or grade which commissioned officers or enlisted men may occupy or hold, or any emolument, perquisite, right, privilege, or benefit incident to or arising out of such status or office, rank or grade.'

But the important point, is 'No person so detailed or appointed shall be subject to direction by or control by the Department from which detailed or appointed or by any agency or officer thereof directly or indirectly with respect to his responsibilities under this act or within the Federal Aviation Agency.'

We are trying to have these people have the same relative status as a civil-service person who is assigned to the Agency.⁸

Mr. Quesada thus clearly expressed the intent of this legislation regarding military participation in this agency.⁹

Thus, the Federal Aviation Act of 1958 established unitary, one-agency control under an Administrator with a Deputy Administrator possessing a military background.¹⁰ The legislation further provided that (1) in the event of war, the President by Executive Order may transfer to the Department of Defense any functions of the Agency, and (2) the FAA Administrator and the Secretary of Defense, and the FAA Administrator and the Administrator of the National Aeronautics and Space Administration, were to establish by "cooperative arrangement suitable arrangements for the timely exchange of information pertaining to their programs, policies, and requirements directly relating to the" responsibilities of the FAA Administrator under the Act.¹¹

To what extent is this system applicable to radio frequency allocation? Before answering, it would be well to examine the other recent analogue for any insights it may impart.

8. *Id.* at 3748.

9. *Ibid.*

10. *Id.* at 3749; see 49 U.S.C. 1342 (1963).

11. 49 U.S.C. 1343(b) (1963).

B. *The Atomic Energy Commission*

In the atomic energy area, there was nothing like the decades of experience, unhappy though some of it was, in airspace control. There were indeed a few short years of experience in the Manhattan District, during wartime, which was hardly a blueprint for the long future of atomic energy development in the interest of the welfare and the security of the people of the United States, and of world peace.

The task facing Congress was nothing less than "to direct the development of atomic energy in such a way as to improve the public welfare, increase the standard of living, strengthen free competition in private enterprise, and promote world peace," all subject to the "paramount objective of assuring the national defense and security."¹² To carry out these purposes, the Atomic Energy Act of 1946 provided for government control over atomic energy and for government programs of "information, production, research, and development,"¹³ and for an Atomic Energy Commission as the principal administrative body responsible for "administering domestic control over atomic energy, for carrying on production, research, and development programs, and for stimulating and supporting private research and development."¹⁴

The decision to have an Atomic Energy Commission, however, immediately raised the issue of whether it should have a civilian or a military complexion. The Congress and the Executive were clear that it should be the former. As stated by the Report of the Special Senate Committee on Atomic Energy on the bill which became the Atomic Energy Act of 1946:

The decision to limit membership eligibility to civilians was adopted by the committee in keeping with established traditions of our Government. It accords with principles cherished and maintained throughout American history. Departure from these principles has occasioned judicial, executive, and legislative disapproval. This is not to say that the committee fails to recognize legitimate and important areas of atomic energy development and control touching on the responsibilities of the military departments. Indeed, throughout the bill, wherever these areas are involved, provision is made for full military participation, and independent activities of the military departments, especially in research and development, are not infringed but expressly encouraged.¹⁵

12. Senate Report No. 1211 to accompany S. 1717, 79th Cong., 2d Sess. 1946, 1946 U.S. Code Cong. Service 1327-1328.

13. Note 12 at 1328.

14. Note 12.

15. Note 12.

However, having made this fundamental decision to adhere to "established traditions" of civilian control, the Committee also perceived the desirability of giving the armed forces "a proper voice" in such matters as the development, manufacture, storage, and use of bombs, which occupied at that time about 95% of the time, funds and energy of the program.¹⁶ (The division of the radio spectrum is estimated to be approximately equal as between Federal Government and civilian use.)

The solution was set forth as follows:

A Military Liaison Committee appointed by the Secretaries of War and Navy is to consult with the Commission on all activities relating to the military applications of atomic energy. This provision has been adopted to give the armed forces a proper voice in such matters as development, manufacture, storage, and use of bombs; allocations of fissionable materials for military research; control of information relating to the manufacture and use of atomic weapons. Upon receiving the recommendations of the Military Liaison Committee the Secretaries of War and Navy may at their own discretion carry to the President a protest against any of the Commission's actions or failures to act in reference to the matters described. In such event, final decisions as to the course of action of the Commission relating to matters for which the War and Navy Departments have responsibility are made by the President.¹⁷

The 1954 Amendment to the 1946 Act was quite extensive, but not in respect of this question. It changed the 1946 Act's organizational provisions only by (a) establishing as one of eleven program divisions, the Division of Military Application, to be headed by an active member of the armed forces, and (b) lodging in the Department of Defense, rather than the Military Liaison Committee, the responsibility of taking exception to action or proposed action of the Commission, and thereby referring the matter to the President for resolution.

What light is cast upon our problem of selection of the one-agency decision-maker by the FAA and AEC solutions of analogous problems?

Three major contributions to the solution of our problem seem to emerge from these recent experiences. The first is that in an area where civilian and military uses are in competition, it is of great importance to maintain our "established tradition" of civilian control. In both the FAA and the AEC cases, though military uses of the airspace and of atomic energy, respectively, were undeniably of great, if not, in the latter,

16. Senate Report No. 1699 to accompany S. 3690, 83d Cong., 2d Sess. 1954 U.S. Code Cong. and Adm. News 3456, 3458.

17. Note 12 at 1329.

of overwhelming, security significance, a most deliberate decision to maintain the tradition of civilian control which has served us so well since the earliest days of the Republic was made and adhered to. Nor has there been the slightest indication since those decisions that our security has been adversely affected.

Secondly, where there is an important security interest at stake, civilian control has not meant complete elimination of the influence of military considerations from decision-making where these may be competing interests. The placing of a military man in an important second position in the FAA, which is headed by an Administrator, and the establishment of a Military Liaison Committee with right of appeal by the Department of Defense to the President in the case of the AEC are earnest of a desire to be certain that security considerations shall not be short-weighted.

Thirdly, the differing techniques of assuring military participation tend to reflect the difference in administrative structure where there is a single Administrator as compared with a Commission. In the first case, a strongly placed second man can give needed assurance, while in the second, a connection to a person or to an agency such as the Defense Department with access to the President, rather than a single adviser to a Commission, appears to be most suitable.

If an administrative organization corresponding to this experience is to be applied to the frequency allocation problem, what would the structure comprise?

1. For the one-agency decision-maker, the choice lies between the FCC or a single Administrator who would be a combined DTM and FCC so far as determining amongst competing Federal Government and civilian uses is concerned. The argument for the FCC, and against an FAA-type Administrator in this context, however, is strong. The FCC is and has been the regulatory agency for the entire spectrum, with the sole exception of licensing Federal Government stations, for over 30 years. Unlike the CAB-CAA structure, there has been an intended centralization of responsibility for all aspects of spectrum management in the FCC, but for this one area of Federal Government use. The CAB always was envisioned as the regulatory agency for commercial uses of airspace, not as the agency to exercise overall authority to assign airspace and otherwise regulate in the non-commercial area as well.

Moreover, there is no reason *a priori* to think that the planning for maximum utilization of the spectrum would be more successfully performed under a single Administrator, with a subsidiary FCC and DTM-IRAC. The AEC has appeared to perform overall atomic energy utilization through a General Manager at least as ably as the FAA Administrator has performed this aspect of his functions.

Finally, the nature of the problem—a concern that neither military nor civilian uses will be short-weighted—appears to call for retention of the agency which has developed great experience in weighing competing claims to allocation of frequencies in rule-making proceedings, and to look to other safeguarding techniques to avoid underweighting security considerations. This seems to be particularly desirable in view of the fact that civilian commissions, such as the AEC, have not hitherto demonstrated callous disregard of security matters. In fact, a good case may be made that they are so conscious of the possibility that they may be charged with the offense that they bend over backwards.

2. If the FCC is to be given the task of deciding frequency allocations among all competing uses, as recommended above, what safeguarding techniques should be employed in order to assure that security considerations have “a proper voice” in the determination of frequency allocations? If it is difficult to envision a single adviser to or associate of a commission as having a voice equal to that of the entire commission—if a FAA “second man” cannot work—it seems clear that a mechanism something like that of the AEC’s Military Liaison Committee—Defense Department is in order.

The choice on this score, in the context of frequency allocation, appears to be between having (a) each disappointed Federal Government agency being able to take its disappointment at the hands of the FCC to the President for resolution, (b) only the Defense Department but not other federal agencies being able to do so, or (c) only the Director of Telecommunications Management, advised by IRAC, having such access to the President for decision on the frequency allocation where FCC has decided for civilian use and a federal agency is dissatisfied.

To allow each disappointed federal agency to have access to the President (course a), regardless of the views of his DTM, appears to be quite an unwarranted administrative burden upon him, and not conducive to good management. While a respectable case can be made for the proposition that only the Defense Department for security reasons, not the Forest Service for firefighting reasons, should be able to secure a second hearing from the President (course b), this might be too sharp a break from the past. Moreover, not only the Defense Department is involved in communications of a security character. The Coast Guard, part of the Treasury Department in peacetime, cannot be excluded from the security area, and the same might be said of other agencies or parts thereof as well.

Accordingly, it would seem sensible to adopt course c—authorizing the Director of Telecommunications Management, advised by IRAC, to request the FCC to withhold final action allocating frequencies to a

competing civilian use, pending referral of the contested Federal Government-civilian use controversy to the President for decision.

It may and perhaps will be protested that such a system would throw all such contests to the President, who would in effect delegate decision-making to his DTM, who in turn would defer to the requesting Federal Government agency, and hence civilian use would receive short shrift at the end of a lengthy journey.

While of course this may be a possibility, it is nonetheless highly unlikely. For if Congress were to legislate the changes in the Federal Communication Act which would be necessary to create the system herein recommended, it would be making it quite clear to all agencies and to the President that it expected the FCC's frequency allocation determination to be the final decision except in the unusual case where the President, upon the carefully considered advice of his DTM, was convinced that an important national interest urgently demanded that the FCC be overridden. In consequence, it is very doubtful that the DTM would seek to have the President overturn every FCC determination which might be less than satisfactory to the requesting federal agency, and still more unlikely that the President would do so even were he so advised.

In any event, the fact that a system may be capable of being utilized in a manner inconsistent with the intentions of its begetters is not persuasive that it is a poor mechanism—it may mean merely, should it be so used, that steps to correct its misuse should then be undertaken. The alternative—to fail to provide for appeal to the President where it is fervently believed that important security interests are at stake and have been underweighted—appears to be quite infeasible under present circumstances.

(2) *Procedures in Frequency Allocation Among All Users*

As we have seen in Parts II and III, the FCC procedures in allocating frequencies among competing civilian uses are the familiar rule-making procedures which the APA and the FCC Act itself have long prescribed and which the FCC, in common with other major regulatory agencies, has long followed. It is plain that these procedures are wholly appropriate in the FCC determination of frequency allocations among all competing uses, including those requested by Federal Government agencies.

While, of course, security information must be able to be withheld from public scrutiny, this poses no problem in rule-making proceedings. The APA and the FCC Act permit wide discretion in the administrative agency to do so. Thus, section 4 of the APA specifically states that its notice and public procedure provisions are not applicable where the

agency "for good cause finds . . . that [they] are . . . contrary to the public interest."

Even if adjudication were involved, the problem of security information can and has been handled quite well with a "minimum impairment of procedural rights." For example, section 181 of the Atomic Energy Act (42 U.S.C. § 2231) requires applicability of the APA to all AEC "agency action" in licensing, except that where proceedings involve "Restricted Data or defense information," regulations shall provide "parallel procedures as will effectively safeguard" such data or information from unauthorized persons "with minimum impairment of the procedural rights which would be available" if such data or information were not involved. And the AEC followed this directive with regulations (10 CFC. Subpart I, Sec. 2.900 ff.) which appear to meet these objectives quite successfully.

Perhaps the major question concerning the procedures to be followed in allocations of frequencies among all users, including Federal Government users, is not the nature of the rule-making procedures which the FCC would utilize—these are well-known and standardized. Rather, it is the question of the role of DTM-IRAC in, and its relationship to, the FCC rule-making procedure leading to the proposed FCC frequency allocation.

While the internal administrative structure for the allocation of frequencies among Federal Government agencies is, strictly speaking, outside the scope of this study except to the extent that it affects allocation between Federal Government and civilian uses, some observations may nonetheless be relevant. In view of the large number and great variety of Federal Government users and uses, the desire to avoid unnecessary competition between them and by a number of them in contest before the FCC with civilian users, and the need to achieve the most effective administration of the spectrum by the FCC, it would appear to be most wise to retain the basic DTM-IRAC structure and to strengthen it materially. Federal Government agency applications for frequencies should be screened by DTM-IRAC more effectively than hitherto, so that both DTM and the concerned agency will be in a position to make an effective case before the FCC in competition with civilian use applicants. One means of accomplishing this strengthening of DTM-IRAC justification procedures might be a requirement that the requesting Federal Government agency show endorsement of its application by the DTM in the rule-making proceeding before the FCC.

These recommendations are not earth-shaking. They are designed to apply to the frequency allocation problem the techniques which have worked successfully for so long in closely analogous fields. Their purpose is to terminate the most unfortunate division of responsibility and deep

dissatisfaction therewith which has for so long persisted in frequency allocation between Federal Government and civilian use, and thereby to achieve unified and centralized spectrum management in the public interest. There is no magic, of course, in structures or organizations or procedures—they must all be operated by men. But structures and organizations and procedures can help or they can hinder men. Those which we have recommended we firmly believe to be in the former category, just as those which now exist appear to be in the latter.