

APPENDIX B.—CHANGES TO FREQUENCY ALLOCATIONS SINCE 1946, FEDERAL COMMUNICATIONS COMMISSION, MAY 1, 1968

Prior to World War II, international agreement had been reached as to the allocation of frequencies between 10 kHz and 30 MHz. This range of frequencies was referred to as the "usable" spectrum and as early as 1945 some services in the United States were already encountering congestion in the bands to which they were assigned.

Technology advanced rapidly as a result of the war, enabling the upper limit to be extended from 30 MHz to 10,500 MHz (10.5 GHz) at the International Radio Conference held by member governments of the International Telecommunication Union in Atlantic City in 1947. This extension of the frontier was accomplished with two major purposes in mind, that is, to enable those services already established to expand still further and to accommodate new services that might develop. Services were encouraged to go to these higher frequencies.

A listing of the major allocation proceedings taking advantage of this and later extensions follows:

Docket No.	Date adopted	Description or caption
6651	May 1945	Some changes in existing land mobile allocations made; however, greatest impact was in the higher regions of the spectrum. Provision made for the land mobile radio services in the bands 25-50 MHz, 104-108 MHz, and 152-162 MHz. The band 460-470 MHz was set aside for the new Citizens Radio Service. Other land mobile radio services were given frequencies for the first time including the Railroad Radio Service, the Limited Private Radiotelephone Service, and the General Mobile Radio Service (bus, truck, taxicab, and common carrier). In a 3d report in this proceeding the Commission decided to permanently locate FM broadcasting in the band 88 to 108 MHz. This action necessitated a shift in the land mobile allocation between 104 and 108 MHz to the alternative band 72-76 MHz. Note: In this proceeding the Commission first enumerated the basic allocation principles, still applied today, to be certain the public receives the maximum benefit from the electromagnetic spectrum. These principles are: To examine each request to determine whether the service really requires the use of radio or whether wire lines are a practicable substitute. With an acute shortage of frequencies, it is not in the public interest to assign a portion of the spectrum to a service which can adequately and feasibly use wire lines instead of radio. The Commission's determination is not limited to technical considerations, but also takes into account economic and social factors as well as considerations of national policy. All radio services should not be evaluated alike. Radio services which are necessary for the safety of life and property deserve more consideration than those services which are more in the nature of convenience or luxury. To take into consideration the total number of people who will probably receive benefits from a particular service. Other factors being equal, the Commission attempts to meet the requests of those services which propose to render benefits to large group of the population rather than to those services which aid relatively small groups. To take into consideration the proper place in the spectrum for the service, based upon engineering considerations of the propagation characteristics in different portions of the spectrum. Certain frequencies can be used more effectively by services requiring comparatively long range communications, while others are better suited for short range communications. In determining competing requests of 2 or more services for the same frequencies, where 1 or more of the services involved has already been assigned frequencies on a regular basis, the Commission gives careful consideration to the number of transmitters and receivers already in use, the investment of the industry and the public in equipment, and the cost and feasibility of converting the equipment for operation on different frequencies.