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Federal Aviation Agency

ADVISORY CIRCULAR

AC NO: 90-11

AIR TRAFFIC CONTROL AND GENERAL OPERATIONS

EFFECTIVE: 9/16/64

SUBJECT: AIR TRAFFIC CONTROL RADIO FREQUENCY ASSIGNMENT PLAN

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1. PURPOSE. This circular describes the civil air traffic control very high frequency assignment plan and the allocation of frequencies in the 118-136 Mc/s band.

2. GENERAL. Not too long ago, the relatively few 100 kc/s VHF channels below 127 Mc/s allocated to the aeronautical mobile service were sufficient for aviation's needs. However, the growth of aviation has created a very complex air traffic control environment. This increased the demands for air traffic control services, which in turn, required more communications channels. It became apparent that the existent channels would not begin to fulfill these communications requirements. In 1960, additional radio spectrum was reallocated for air traffic control and a long range air traffic control radio frequency assignment plan, extending to beyond 1966, was announced to the public. Since that time, the FAA's ground communications equipment has been, and is being, upgraded so that complete 50 kc/s capability by January 1, 1966, will have been achieved. It is not expected that air traffic control requirements in the foreseeable future will require implementation of 50 kc/s channels in the Alaskan, Pacific, and Caribbean areas.

3. FREQUENCY ASSIGNMENT PLAN TO JANUARY 1, 1966. This phase of the plan is using 50 kc/s spaced channels above 127 Mc/s while retaining 100 kc/s spaced channels below 127 Mc/s. In high traffic density areas, air traffic control communications requirements have necessitated the assignment of 50 kc/s channels, both above and below 127.0 Mc/s. Every effort will be made to adhere to the

established VHF communications assignment plan, which follows, and the assignment of frequencies not conforming to this plan will be made only when interference protection standards cannot otherwise be maintained.

a. High Altitude Enroute. Above 127.0 Mc/s with 50 kc/s spacing, using discrete frequencies only.

b. Low Altitude Enroute.

(1) ARTCC Radar Sector Discretes. On 100 kc/s channels between 118-127 Mc/s with 100 kc/s adjacent-channel protection wherever possible. As requirements dictate, 50 kc/s protection of the 100 kc/s assignments will be implemented on a case-by-case basis.

(2) ARTCC Non-Radar Sector Center Area Discretes (CAD). On any odd tenth decimal frequency between 118-127 Mc/s with 100 kc/s adjacent-channel protection.

(3) ARTCC Non-Radar Sector Discretes. Above 127.0 Mc/s with 50 kc/s spacing.

c. Flight Service Stations. 100 kc/s protection provided to 122.1/122.2/VOR Double Channel Simplex (DCS) and 126.7 Mc/s; 50 kc/s protection provided to 135.9 Mc/s.

d. Local/Approach/Departure Control. On 100 kc/s channels between 118-127 Mc/s with 100 kc/s adjacent-channel protection and with the first assignment priority on the odd decimal frequencies and the second assignment priority on the even decimal frequencies. 50 kc/s protection of the 100 kc/s assignments will be implemented as requirements dictate. Second channels of approach/departure control may be on 50 kc/s channels as required.

e. VFR Radar Advisory. Same as local control with second channels on 50 kc/s spacing.

f. Ground Control. On 100 kc/s channels between 121.6-121.95 Mc/s. Second channels can be on any 50 kc/s channel in the airport utility band.

g. Clearance delivery. On any 50 kc/s channel in the 118-136 Mc/s band. Limited equipment users will receive clearance delivery on ground control channels.

4. FREQUENCY ASSIGNMENT PLAN AFTER JANUARY 1, 1966.

a. The emergency frequency 121.5 Mc/s will continue to have 100 kc/s protection. This is in consonance with international agreements and national radio regulations.

b. Flight Service Stations will have 100 kc/s protection on 122.1/122.2/VOR DCS and 50 kc/s protection on 126.7 and 135.9 Mc/s.

c. ARTCC enroute assignments (no CAD frequencies) will be on any 50 kc/s or 100 kc/s channel in the 118-136 Mc/s band.

d. Terminal assignments will be on any 50 kc/s or 100 kc/s channel in the 118-136 Mc/s band.

e. To the extent available and consistent with operational requirements in congested areas, 100 kc/s channels will be assigned to low altitude enroute and terminal functions. If sufficient channels are not available to provide this service, it may be necessary to adopt regulations requiring aircraft to be equipped with 50 kc/s channel radios under certain operational conditions.

5. FREQUENCY ALLOCATION. Attachment 1 shows the national allocation of frequencies in the 118-136 Mc/s aeronautical mobile service band.

Lee E. Warren, Director
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