

95. Transmitting apparatus installed at an amateur station must be operated in such a manner as not to exceed the power authorized. Power supply transformers should be designed with this object in view, and must clearly indicate the voltage for each tapping. Tappings should be arranged in such a way as to obviate without a major alteration, the possibility of an increase of voltage beyond that necessary to supply the licensed power.

96. Approved instruments for measuring the power in an amateur transmitter must be installed and maintained in a manner satisfactory to the Department. Where separate instruments for measuring the voltage and current d.c. readings for the various stages are not available, suitable terminations, clearly designated, or other appropriate provision must be made so that requisite readings may be obtained with facility. Any such terminations or other provision must be so arranged as to preclude the possibility of injury to personnel.

97. All power supplies for amateur transmitters, obtained from an a.c. source, must be adequately filtered.

**PART V.—RULES CONCERNING OPERATING CONDITIONS OF AMATEUR STATIONS. TRANSMITTING FREQUENCIES.**

98. The bands of frequencies that may be used for transmissions by amateur station licensees are:—

3.5	—	3.8	mC/s.	166	—	170	mC/s.
7.0	—	7.2	"	1,345	—	1,425	"
14.0	—	14.4	"	2,500	—	2,700	"
27.185	—	27.455	"	5,250	—	5,650	"
28.0	—	30.0	"	10,000	—	10,500	"
50.0	—	54.0	"				

These allotments are subject to such amendment as may be found necessary from time to time.

99. The licensee of each amateur station must take all steps necessary to ensure the maintenance of transmissions on a frequency sufficiently remote from the limits of the bands named in the preceding paragraph as to preclude the possibility of interference with services on adjacent bands. For this purpose he must, unless exempted by the Department from so doing, maintain, in good order, apparatus of a type approved by the Department, the minimum requirement for all frequency bands below 50 mC/s. being a heterodyne frequency meter, preferably of the crystal calibrator type.

100. When a crystal is used in conjunction with a frequency multiplying circuit, care must be taken to ensure that the signals emitted on the multiple frequency fall within an amateur band.

**MONITORS.**

101. A satisfactory monitoring system must be maintained and used by each amateur station licensee, as a check on the quality of all transmissions.

**TYPES OF EMISSION.**

102. Emissions are classified as under.—

Type A <sub>0</sub> waves	.. . . .	Continuous waves.
Type A <sub>1</sub>	" .. . . .	Keyed continuous waves.
Type A <sub>2</sub>	" .. . . .	Interrupted Continuous Waves and Modulated Continuous Waves (I.C.W. and M.C.W.).
Type A <sub>3</sub>	" .. . . .	Telephony (Amplitude modulation).
Type A <sub>4</sub>	" .. . . .	Facsimile.
Type A <sub>5</sub>	" .. . . .	Television.
Type B	" .. . . .	Damped Waves (Spark).
FM	.. . . .	Frequency modulation (including frequency modulated telephony transmissions and telegraphy emissions employing carrier shift or other frequency modulation techniques).
Pulse	.. . . .	Pulse transmissions, unmodulated.