

CHAPTER 6

(Extract from Radio Regulations, Geneva, 1959)

DESIGNATION OF EMISSIONS

Section I. Classification

105 2. Emissions are classified and symbolized according to the following characteristics: (See Note)

- (1) Type of modulation of main carrier
- (2) Type of transmission
- (3) Supplementary characteristics

Note: As an exception to the provisions of Nos. 106 to 108, damped waves are designated by B.

106	3. (1) Types of modulation of main carrier:	Symbol
	a) Amplitude	A
	b) Frequency (or Phase)	F
	c) Pulse	P
107	(2) Types of transmission:	
	a) Absence of any modulation intended to carry information	0
	b) Telegraphy without the use of a modulating audio frequency	1
	c) Telegraphy by the on-off keying of a modulating audio frequency or audio frequencies, or by the on-off keying of the modulated emission (special case: an unkeyed modulated emission)	2
	d) Telephony (including sound broadcasting)	3
	e) Facsimile (with modulation of main carrier either directly or by a frequency modulated sub-carrier)	4
	f) Television (vision only)	5
	g) Four-frequency duplex telegraphy	6
	h) Multichannel voice-frequency telegraphy	7
	i) Cases not covered by the above	9

108 (3) Supplementary characteristics:

Symbol
(none)

a) Double sideband

b) Single sideband:

__ reduced carrier

__ full carrier

__ suppressed carrier

c) Two independent sidebands

d) Vestigial sideband

e) Pulse:

__ amplitude modulated

__ width (or duration) modulated

__ phase (or position) modulated

__ code modulated

A
H
J
B
C
D
E
F
G

109 4. The classification of typical emissions is tabulated as follows:

Type of Modulation of Main Carrier	Type of Transmission	Supplementary Characteristics	Symbol	
Amplitude Modulation	With no modulation	—	A0	
	Telegraphy without the use of a modulating audio frequency (by on-off keying)	—	A1	
	Telegraphy by the on-off keying of an amplitude-modulating audio frequency or audio frequencies, or by the on-off keying of the modulated emission (special case: an unkeyed emission amplitude modulated)	—	A2	
	Telephony		Double sideband	A3
			Single sideband, reduced carrier	A3A
			Single sideband, suppressed carrier	A3J
		Two independent sidebands	A3B	

Type of Modulation of Main Carrier	Type of Transmission	Supplementary Characteristics	Symbol
Amplitude Modulation (continued)	Facsimile (with modulation of main carrier either directly or by a frequency modulated sub-carrier)	—	A-4
		Single sideband, reduced carrier	A-4A
	Television	Vestigial sideband	ASC
	Multichannel voice-frequency telegraphy	Single sideband, reduced carrier	A7A
	Cases not covered by the above, e.g. a combination of telephony and telegraphy	Two independent sidebands	ASB
Frequency (or Phase) Modulation	Telegraphy by frequency shift keying without the use of a modulating audio frequency: one of two frequencies being emitted at any instant	—	F1
	Telegraphy by the on-off keying of a frequency modulating audio frequency or by the on-off keying of a frequency modulated emission (special case: an unkeyed emission, frequency modulated)	—	F2
	Telephony	—	F3
	Facsimile by direct frequency modulation of the carrier	—	F4
	Television	—	F5
	Four-frequency duplex telegraphy	—	F6
	Cases not covered by the above, in which the main carrier is frequency modulated	—	F9

Type of Modulation of Main Carrier	Type of Transmission	Supplementary Characteristics	Symbol
Pulse Modulation	A pulsed carrier without any modulation intended to carry information (e.g. radar)	—	P0
	Telegraphy by the on-off keying of a pulsed carrier without the use of a modulating audio frequency	—	P1D
	Telegraphy by the on-off keying of a modulating audio frequency or audio frequencies, or by the on-off keying of a modulated pulsed carrier (special case: an unkeyed modulated pulsed carrier)	Audio frequency or audio frequencies modulating the amplitude of the pulses	P2D
		Audio frequency or audio frequencies modulating the width (or duration) of the pulses	P2E
		Audio frequency or audio frequencies modulating the phase (or position) or the pulses	P2F
	Telephony	Amplitude modulated pulses	P3D
		Width (or duration) modulated pulses	P3E
		Phase (or position) modulated pulses	P3F
		Code modulated pulses (after sampling and quantization)	P3G
Cases not covered by the above in which the main carrier is pulse modulated	—	P9	