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AIR NAVIGATION SERVICES

COMMUNICATION

DESIGNATION OF EMISSIONS FOR NAVAIDS AND COMMUNICATIONS

Δ Indicates changes

Δ This AIC replaces AIC 41-7 dated 93-04-15.

1. The full designation of an emission is composed of information on the Bandwidth and Class of Emission.
2. The Bandwidth is expressed by three numerals and one letter. The letter occupies the position of the decimal point and represents the unit of bandwidth.

e.g. 300 Hz = 300H
1100 Hz = 1K10
2,7 KHz = 2K70
20,9 KHz = 20K9
6 KHz = 6K00
3 MHz = 3M00

3. The Class of Emission is symbolised by three basic characteristics.

viz Basic Characteristics

(i) First Symbol

Type of modulation of main carrier.

(ii) Second Symbol

Nature of signal(s) modulating the main carrier.

(iii) Third Symbol

Type of information to be transmitted.

4. For Navaids and Communications, the following designations of emission apply:

(i) Instrument Landing System (ILS)

Localiser - 2K10A2A
Glide Path - 300HA2A

(ii) VHF Omni-Directional radio Range (VOR)

-20K9A9W

(iii) Non-Directional Beacon (NDB)

Single Sideband -1K10H2A

Double Sideband -2K10A2A

(iv) Distance Measuring Equipment (DME)

-3M00M1D

(v) Secondary Surveillance Radar (SSR)

-3M00M1D

(vi) Communications

V.H.F. -6K00A3E

S.S.B. -2K70J3E

5. Definition of Class of Emission applying to Nav aids and Communications:

(i) First Symbol

A = Double Sideband;

H = Single Sideband, Full Carrier;

J = Single Sideband, Suppressed Carrier;

M = Modulated in Position/Phase.

(ii) Second Symbol

1 = A single channel containing quantized or digital information without the use of a modulating sub-carrier;

2 = A single channel containing quantized or digital information with the use of a modulating sub-carrier;

3 = A single channel containing analogue information;

9 = Composite system with one or more channels containing quantized or digital information, together with one or more channels containing analogue information.

(iii) Third Symbol

A = Telegraphy for aural reception;

B = Telegraphy for automatic reception;

D = Data Transmission, Telemetry, Telecommand;

E = Telephony (including sound broadcasting);

W = Combination of above.