

Classification

**ANTENNA EQUIPMENT CHARACTERISTICS**

Page

1. Transmitting <input type="checkbox"/> Receiving <input type="checkbox"/> Transmitting and Receiving <input type="checkbox"/>	
2. Nomenclature, Manufacturer's No.	3. Manufacturer's Name
4. Frequency Range	5. Type
6. Polarization	7. Scan Characteristics (a) Type (b) Vertical Scan (1) Max Elev (2) Min Elev (3) Scan rate (c) Horizontal Scan (1) Sector Scanned (2) Scan Rate (d) Sector Blanking                      Yes <input type="checkbox"/> No <input type="checkbox"/>
8. Gain (a) Main Beam (b) 1st Major Side Lobe	
9. Beam Width (a) Horizontal (b) Vertical	
10. Remarks  (a)  (b)	

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## ANTENNA EQUIPMENT CHARACTERISTICS

1. Check the appropriate block to indicate the type of antenna. For multi-antenna system, use one page for each antenna.
2. Enter the assigned alphanumeric equipment designation. If above is not available, enter the manufacturer's model number e.g. DS6558 and complete item 3. If above is not available, enter a short descriptive title e.g. ATS-6 Telemetry antenna.
3. Enter the manufacturer's name if available. If a manufacturer's model number is listed in item 2, this item must be completed.
4. Enter the range of frequencies for which the antenna is designed. Indicate units e.g. kHz or MHz.
5. Enter the generic name or describe general technical features e.g. Horizontal, Log periodic, Cassegrain with polarisation twisting, Whip, Phased Array or Conformal Array.
6. Enter the polarisation: if circular, indicate whether it is left or right hand.
7.
  - a. If this antenna scans, enter the type of scanning, e.g. vertical, horizontal, vertical and horizontal.
  - b. Vertical scan:
    - (1) enter the maximum elevation angle in degrees (positive or negative referenced to the horizontal) that the antenna can scan.
    - (2) enter the minimum elevation angle in degrees (positive or negative referenced to the horizontal) that the antenna can scan.
    - (3) enter the vertical scanning rate in scans per minute.
  - c. Horizontal scan:
    - (1) enter the angular scanning range in degrees of the horizontal sector scanned.
    - (2) enter the horizontal scan rate in scans per minute.
  - d. Indicate if antenna is capable of being sector blanked. If yes, enter details in Remarks (10).
8.
  - a. Enter the maximum gain in dB relative to an isotropic radiator (dBi).
  - b. Enter the nominal gain of the 1st major side lobe in dBi and the angular displacement from the main beam in degrees.
9. Enter the -3dB beam width in degrees.
10. Use this item to describe any unusual characteristics of the antenna, particularly as they relate to the assessment of electromagnetic compatibility. Use this item to amplify or clarify any of the information provided above. In addition, enter the following information if applicable:
  - a. the front to back ratio in dB for directional antennas used in Radio Relay circuits.
  - b. for phased array antennas, enter:
    - (1) mode of operation, single or multiple beam;
    - (2) single beam parameters;
    - (3) multiple beam parameters:
      - (a) polarisation of each beam;
      - (b) gain of each beam;
      - (c) beam width of each beam;
      - (d) scan characteristics of each beam (refer to item 7).