

**Attachment D** [ List of Test/Measuring Equipment ] (for X-band radar)

## For Clause 3.1 RF Power Output

| <u>Model</u>             | <u>Type</u> | <u>Serial no.</u> | <u>Mfr.</u>         |
|--------------------------|-------------|-------------------|---------------------|
| Spectrum Analyzer        | 71210C      | 2927A02847        | HP                  |
| Oscilloscope             | TDS680B     | B030202           | Tektronix           |
| Directional Coupler      | 5D364S      | R05762            | Shimada             |
| Voltage Divider          | HV-P30      | 2780              | Iwatsu              |
| Current Transformer      | 2100        | ----              | Pearson Electronics |
| Power Meter              | 436A        | 2410A19137        | HP                  |
| Power Sensor             | 8481A       | 2349A39603        | HP                  |
| Frequency Counter        | TR5824A     | 41940036          | Advantest           |
| Frequency Meter          | X532B       | 1441A00523        | HP                  |
| Crystal Detector         | 423B        | 1822A24228        | HP                  |
| Dummy Load               | ----        | 8411057           | Shimada             |
| Coax. Attenuator (10 dB) | 8491B       | 28845             | HP                  |
| Coax. Attenuator (3 dB)  | 8491A       | 25225             | HP                  |

## For Clause 3.2 Modulation Characteristics

| <u>Model</u>             | <u>Type</u> | <u>Serial no.</u> | <u>Mfr.</u> |
|--------------------------|-------------|-------------------|-------------|
| Oscilloscope             | TDS680B     | B030202           | Tektronix   |
| Crystal Detector         | 423B        | 1822A24228        | HP          |
| Directional Coupler      | 5D364S      | R05762            | Shimada     |
| Dummy Load               | -----       | 8411057           | Shimada     |
| Voltage Divider          | HV-P30      | 2780              | Iwatsu      |
| Spectrum Analyzer        | 71210C      | 2927A02847        | HP          |
| Coax. Attenuator (10 dB) | 8491B       | 28845             | HP          |
| Coax. Attenuator (3 dB)  | 8491A       | 25225             | HP          |

For Clause 3.4 Spurious Emissions at Antenna Terminal

| <u>Model</u>             | <u>Type</u> | <u>Serial no.</u> | <u>Mfr.</u> |
|--------------------------|-------------|-------------------|-------------|
| Spectrum Analyzer        | 71210C      | 2927A02847        | HP          |
| Coax. Attenuator (10 dB) | 8491B       | 28845             | HP          |
| Coax. Attenuator (3 dB)  | 8491A       | 25225             | HP          |
| External Mixer           | 11970K      | 3003A05695        | HP          |
| External Mixer           | 11970A      | 2332A00905        | HP          |
| Directional Coupler      | 5D364S      | R05762            | Shimada     |
| Dummy Load               | -----       | 8411057           | Shimada     |

For Clause 3.5 Field Strength of Spurious Radiation

| <u>Model</u>                              | <u>Type</u> | <u>Serial no.</u> | <u>Mfr.</u>          |
|-------------------------------------------|-------------|-------------------|----------------------|
| Broadband Rod Antenna                     | 95010-1     |                   | Advanced Electronics |
| Biconical Antenna                         | BIA-25      | 2650              | Electro Metrics      |
| Conical Log-Spiral Antenna                | LCA-25      | 2886              | Electro Metrics      |
| Double Ridged Guide Horn Antenna :RGA-180 |             | 2248              | Electro Metrics      |
| Horn Antenna:                             | ----        | ----              | Toshiba              |
| Spectrum Analyzer:                        | 71210C      | 2927A02847        | HP                   |
| External Mixer                            | 11970K      | 3003A05695        | HP                   |
| External Mixer                            | 11970A      | 2332A00905        | HP                   |
| Coax. Attenuator (10 dB)                  | 8491B       | 28845             | HP                   |
| Coax. Attenuator (3 dB)                   | 8491A       | 25225             | HP                   |

For Clause 3.6 Frequency Stability

| <u>Model</u>          | <u>Type</u> | <u>Serial no.</u> | <u>Mfr.</u> |
|-----------------------|-------------|-------------------|-------------|
| Power Meter           | 436A        | 2410A19137        | HP          |
| Power Sensor          | 8481A       | 2349A39603        | HP          |
| Frequency Meter       | X532B       | 1441A00523        | HP          |
| Directional Coupler   | 5D364S      | R5762             | Shimada     |
| Dummy Load            | ----        | 8411057           | Shimada     |
| Environmental Chamber | PL-4KP      | 14004204          | Tabai Espec |

For Clause 3.7 Suppression of Interference Aboard Ships

| <u>Model</u>             | <u>Type</u>    | <u>Serial no.</u> | <u>Mfr.</u> |
|--------------------------|----------------|-------------------|-------------|
| Spectrum Analyzer        | 71210C         | 2927A02847        | HP          |
| 6 m Whip Antenna         | 14 k - 10 MHz  | ----              | Furuno      |
| 4 m Whip Antenna         | 10 - 30 MHz    | ----              | Furuno      |
| VHF Whip Antenna         | 30 - 300 MHz   | 150M-W2UM         | Anten       |
| UHF Whip Antenna         | 300 - 1000 MHz | ----              | Anten       |
| Network Analyzer         | 8753C          | 3214J01067        | HP          |
| Spectrum Analyzer        | TR4172         | 30690116          | Advantest   |
| Spectrum Analyzer        | 8566B          | 2637A03642        | HP          |
| Coax. Attenuator (10 dB) | 8491B          | 28845             | HP          |
| Coax. Attenuator (3 dB)  | 8491A          | 25225             | HP          |