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CRITERIA TO BE MET BY DOPPLER RADARS
OPERATING IN THE
24.05-24.25 GHz FREQUENCY BAND

The frequency band 24.05-24.25 GHz is available to non-Federal Government radiolocation stations and amateur stations on a shared basis with Federal Government stations. Use of this frequency band by non-Federal Government stations is secondary to Federal Government use and is subject to the condition that the operation of these stations will not interfere with Government operations. In addition, the Federal Government has specified certain criteria that must be met by doppler radars operating in this band. These criteria are as follows:

- (a) The transmitter mean output power shall not exceed 0.2 watt.
- (b) The maximum occupied bandwidth shall not exceed 100 kHz.
- (c) The radio frequency voltages of spurious and harmonic emissions at the antenna terminals of the transmitter shall be at least 36 dB below the mean output power.
- (d) The field strength for spurious and harmonic radiations shall be at least 36 dB below the mean output power from the transmitter.
- (e) The antenna characteristics shall conform or be limited to the following specifications:
 - (1) The product of output power in watts and antenna gain in terms of power ratio shall be no greater than 63.25.
 - (2) The antenna 3 dB main lobe beamwidth shall not exceed 15 degrees.
 - (3) The antenna minor lobe levels shall be at least 22 dB below the main lobe level.

Applications for type acceptance of doppler radars operating in the frequency band cited above will be considered if the transmitter performance characteristics comply with the criteria specified in this Bulletin. Applications for type acceptance of other types of equipment operating in this frequency band, or of doppler radars not complying with the criteria specified above will be coordinated with the Federal Government to determine the acceptance of, or objection to the operation. Parties desiring to operate such equipment may submit a complete description of their proposed operation for consideration prior

to submitting an application for type acceptance. Objection by the Federal Government to the proposed operation will be considered when making the public interest finding on an application for type acceptance as required by Section 2.925(a)(2) of the FCC Rules and Regulations. Such objection by the Federal Government may result in denial of a type acceptance application pursuant to Section 2.929 of the FCC Rules.

Applications for type acceptance of doppler radars operating in the frequency band cited above need not be coordinated with the Federal Government if the transmitter performance characteristics comply with the criteria specified in this Bulletin. In these cases, type acceptance application may be made in accordance with the provisions in Part 2, Subpart J of the Rules. In addition to the usual information and measurement data required by Section 2.983 of the Rules for type acceptance, such applications shall include measurement data and information indicating the capability of the doppler radar to comply with the criteria specified in this Bulletin.

Persons desiring to operate equipment other than doppler radars in the 24.05-24.25 GHz frequency band, or doppler radars not complying with the criteria specified in this Bulletin, may submit a complete description of their proposed operation for consideration prior to submitting an application for type acceptance. Such proposals will be coordinated with the Federal Government to determine the acceptability, or objection to the operation.

Questions relating to the type acceptance procedure and technical matters discussed in this Bulletin may be addressed to:

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