



**Federal Communications Commission**  
Washington, D.C. 20554

March 31, 2014

DA 14-433

## **Small Entity Compliance Guide**

REPORT AND ORDER

### **Amendment of the Commission's Rules to Permit Radiolocation Operations in the 78-81 GHz Band**

FCC 13-95

WP Docket No. 11-202

This Guide is prepared in accordance with the requirements of Section 212 of the Small Business Regulatory Enforcement Fairness Act of 1996. It is intended to help small entities—small businesses, small organizations (non-profits), and small governmental jurisdictions—comply with the new rules adopted in the above-referenced FCC rulemaking docket(s). This Guide is not intended to replace the rules and, therefore, final authority rests solely with the rules. Although we have attempted to cover all parts of the rules that might be especially important to small entities, the coverage may not be exhaustive. This Guide may, perhaps, not apply in a particular situation based upon the circumstances, and the FCC retains the discretion to adopt approaches on a case-by-case basis that may differ from this Guide, where appropriate. Any decisions regarding a particular small entity will be based on the statute and regulations.

In any civil or administrative action against a small entity for a violation of rules, the content of the Small Entity Compliance Guide may be considered as evidence of the reasonableness or appropriateness of proposed fines, penalties or damages. Interested parties are free to file comments regarding this Guide and the appropriateness of its application to a particular situation; the FCC will consider whether the recommendations or interpretations in the Guide are appropriate in that situation. The FCC may decide to revise this Guide without public notice to reflect changes in the FCC's approach to implementing a rule, or to clarify or update the text of the Guide. Direct your comments and recommendations, or calls for further assistance, to the FCC's Consumer Center:

1-888-CALL-FCC (1-888-225-5322)  
TTY: 1-888-TELL-FCC (1-888-835-5322)

Fax: 1-866-418-0232

[fccinfo@fcc.gov](mailto:fccinfo@fcc.gov)

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## I. OBJECTIVES OF THE PROCEEDING

In the *Report and Order* in WT Docket No. 11-202, the Commission amended the rules to permit the certification, licensing, and use of foreign object debris (FOD) detection radar equipment in the 78-81 GHz band. FOD includes any substance, debris, or object in a location that can damage aircraft or equipment, can seriously threaten the safety of airport personnel and airline passengers and have a negative impact on airport logistics and operations. The presence of FOD on airport runways, taxiways, aprons, and ramps poses a significant threat to the safety of air travel. The use of FOD technology will be a critical tool in the detection of FOD at airports.

## II. REGULATIONS AND POLICIES THAT THE COMMISSION ADOPTED OR MODIFIED, INCLUDING COMPLIANCE REQUIREMENTS

In the *Report and Order* the Commission took the following actions:

- Amended Subpart F of Part 90 of the Commission's Rules to permit only FOD detection radar to be authorized in the 78-81 GHz band, and only on a licensed basis.<sup>1</sup>
- Stated that the waiver it granted to Trex Enterprises Corporation (Trex) in the Notice of Proposed Rulemaking in this proceeding,<sup>2</sup> to permit certification, manufacture, and licensing of its FOD detection radar equipment pending the resolution of its petition for rulemaking, will terminate as of the effective date of the final rules adopted in the *Report and Order*. Licensees operating pursuant to the waiver must thereafter comply with the rules adopted in this proceeding. Any equipment approval that was granted pursuant to the waiver will remain valid.

FOD detection radar equipment will be authorized on a licensed basis under Part 90 of the Commission's rules on the condition that the main beamwidth of the antenna (azimuth or elevation) does not illuminate a public roadway near the airport. Applications will be considered and authorized on a case-by-case basis, and will be coordinated with the National Telecommunications and Information Administration's Interdepartment Radio Advisory Committee. The Commission will consider the technical parameters required under the Trex waiver when authorizing FOD equipment and also will accept applications for equipment authorization for devices using similar or more conservative parameters than those specified in that waiver.<sup>3</sup> Any request for equipment authorization of devices with parameters that, in the Commission's evaluation, may be considered to cause more interference as compared with the technical parameters in that waiver will be reviewed on a case-by-case basis.

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<sup>1</sup> See 47 C.F.R. § 90.103.

<sup>2</sup> *Amendment of the Commission's Rules to Permit Radiolocation Operations in the 78-81 GHz Band, Notice of Proposed Rule Making and Order*, WT Docket 11-202, 26 FCC Rcd 17476, 17481 ¶ 18 (2011) (*NPRM*).

<sup>3</sup> Those parameters are as follows: transmit power – 100 mW; antenna gain – 45 dBi; system effective isotropic radiated power – 35 dBw; transmit polarization – vertical; 3 dB transmit beamwidth – 1 deg (el) x 0.4 deg (az); FMCW Chirp (el scan) reception rate – 139.5 Hz. See *NPRM*, 26 FCC Rcd at 17481 ¶ 18; Letter dated Aug. 20, 2012 from Scot Stone, Deputy Chief, Mobility Division, Wireless Telecommunications Bureau to Randall W. Sifers, counsel for Trex.

### **III. RECORDKEEPING AND OTHER COMPLIANCE REQUIREMENTS**

There are no projected reporting, recordkeeping or other compliance requirements. The Commission believes that the changes adopted in the *Report and Order* will promote flexibility and more efficient use of the spectrum, allow licensees to better meet their communication needs, and allow the certification, licensing, and use of foreign object debris detection radar in the 78-81 GHz band.

For details of other compliance requirements refer to the *Report and Order*.

### **IV. WEBLINK**

The *Report and Order*, FCC 13-95, was adopted on July 10, 2013 and released on July 11, 2013. Final rules adopted in the *Report and Order* are effective on August 26, 2013, thirty days after publication of the *Report and Order* in the Federal Register.

[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-13-95A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-13-95A1.doc)  
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