



# PUBLIC NOTICE

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DA 23-624  
Released: July 20, 2023

**OFFICE OF ENGINEERING AND TECHNOLOGY SEEKS COMMENT ON LIBERTY HOLDINGS, LTD. REQUEST FOR WAIVER OF SECTIONS 15.31(C), 15.35(B), AND 15.205(A) OF THE COMMISSION'S RULES**  
**ET Docket No. 23-245**

**Comment Date: August 21, 2023**  
**Reply Comment Date: September 20, 2023**

On April 10, 2023, Liberty Defense Holdings, LTD (Liberty) filed a request for waiver of three Part 15 Commission rules so it can obtain FCC equipment authorization to upgrade the current generation of full-body screening scanners deployed in U.S. airports (legacy system) by the Transportation Security Administration (TSA).<sup>1</sup> The current legacy system operates pursuant to a waiver granted by the Office of Engineering and Technology (OET) in 2006.<sup>2</sup> The new High-Definition Advanced Imaging Technology (HD-AIT) by Liberty will be deployed via upgrade kits to these legacy systems and is designed to transmit across spectrum bands ranging from 10 – 40 GHz.<sup>3</sup> Liberty states that this upgrade will improve transportation security by enhancing threat detection capability and improving the speed at which airline passengers are screened.<sup>4</sup> Liberty suggests that because this waiver request is so substantially similar to two previous waiver requests granted by OET, it merits approval.<sup>5</sup> Because of these design features, Liberty seeks a waiver of Sections 15.31(c), 15.35(b), and 15.205(a) of the Commission's rules.<sup>6</sup>

Liberty requests a waiver of Section 15.31(c) of Commission rules to allow radiated measurements to be performed with the device's frequency sweep active during testing.<sup>7</sup> Section 15.31(c) requires that swept frequency devices be tested with the swept frequency stopped at the frequencies

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<sup>1</sup> Liberty Defense Holdings, Ltd d/b/a Liberty Defense Technologies Request for Waiver of Sections 15.31(c), 15.35(b), and 15.205(a) of the Commission's Rule, filed Apr 10, 2023 (Liberty Waiver Request).

<sup>2</sup> *SafeView, Inc.; Request for Waiver of Sections 15.31 and 15.35 of the Commission's Rules to Permit the Deployment of Security Screening Portal Devices that Operate in the 24.25-30 GHz Range*, ET Docket No. 04-373, Order, 21 FCC Rcd 8814 (OET 2006); *aff'd*, Memorandum Opinion and Order, 25 FCC Rcd 592 (2010) (2006 Legacy Waiver Order).

<sup>3</sup> Liberty Waiver Request at 1-3.

<sup>4</sup> *Id.* at 2.

<sup>5</sup> Liberty Waiver Request at 2 (referencing the 2006 Legacy Waiver Order and *L-3 Communications Security and Detection Systems, Inc.; Request for Waiver of Sections 15.31(c), 15.35(b) and 15.205(a) of the Commission's Rules to Permit the Deployment of Security Screening Portal Devices that Operate in the 20-40 GHz Range*, ET Docket No. 16-45, Order, 31 FCC Rcd 12310 (OET 2016) (2016 Waiver Order)).

<sup>6</sup> *Id.* at 1-3.

<sup>7</sup> *Id.* at 10-11.

chosen for measurement.<sup>8</sup> Multiple other systems, including the legacy system, operate subject to a waiver of this rule.<sup>9</sup> Liberty comments that because its HD-AIT scanner will sweep over the entire authorized frequency range of operations in a similar manner as the existing legacy system, a waiver of 15.31(c) is required.<sup>10</sup>

Liberty also requests a waiver of Section 15.35(b) of the Commission's rules consistent with the other waivers we have granted.<sup>11</sup> Section 15.35(b) requires that when average radiated emissions limits are specified for a device, the peak emission level may not exceed the average emission limit by more than 20 dB.<sup>12</sup> Liberty states that the higher peak power limit it seeks to employ will enable HD-AIT scanners to adequately resolve very low levels of reflections from the scanned subject, and will improve detection accuracy.<sup>13</sup> The legacy system also operates subject to a waiver of this rule section.<sup>14</sup> Additionally, Liberty notes that in 2016 OET granted a waiver section 15.35(b) to permit a similar scanning system to operate, and seeks to have that same limit allowed in that order applied now.<sup>15</sup> Thus, the HD-AIT operations would exceed the requirements of Section 15.35(b) similar to those that OET permits subject to the 2006 and 2016 waivers, Liberty seeks a waiver for this upgraded scanning system.<sup>16</sup>

The frequency range over which Liberty's HD-AIT system intends to operate would cause it to transmit in the restricted bands between 10 – 40 GHz.<sup>17</sup> Section 15.205(a) of the Commission's rules only permits spurious emissions in those restricted bands.<sup>18</sup> As Liberty notes, while Part 15 devices typically are not permitted to intentionally transmit radio frequency energy within these bands, OET has granted a waiver to a similar screening system to operate in the 20 – 40 GHz range, and is not aware of any cases of reported interference.<sup>19</sup> Liberty asserts that since its HD-AIT technology would operate in a similar manner, OET should grant it a waiver to operate in the restricted bands in the 20 – 40 GHz band with similar conditions imposed.<sup>20</sup> The primary difference between Liberty's waiver request and the two security screening system waivers previously granted by the Commission is that the Liberty's HD-AIT system operates over a wider operating bandwidth (10 – 40 GHz) than either the legacy system (24.25 – 30 GHz) or the L-3 system (20 – 40 GHz).<sup>21</sup> Consequently, Liberty requests the instant waiver further extend this allowance to include operations in the 10 – 20 GHz frequency range as well.<sup>22</sup> Liberty states

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<sup>8</sup> 47 C.F.R. § 15.31(c).

<sup>9</sup> See Liberty Waiver Request at n.15 (citing previously granted waivers of Section 15.31(c)).

<sup>10</sup> *Id.* at 10-11.

<sup>11</sup> *Id.* at 11-12. See 2006 Legacy Waiver Order and 2016 Waiver Order.

<sup>12</sup> 47 C.F.R. § 15.35(b).

<sup>13</sup> Liberty Waiver Request at 11-12.

<sup>14</sup> See 2006 Legacy Waiver Order.

<sup>15</sup> Liberty Waiver Request at 11-12 (referencing 2016 Waiver Order).

<sup>16</sup> *Id.* at 11-12.

<sup>17</sup> *Id.* at 2-3, 8, and Liberty Waiver Request Appendix A at 3.

<sup>18</sup> 47 C.F.R. § 15.205(a). (Restricted bands in the 10–20 GHz range are: 10.6–12.7 GHz, 13.25–13.4 GHz, 14.47–14.5 GHz, 15.35–16.2 GHz, and 17.7–21.4 GHz).

<sup>19</sup> Liberty Waiver at 12, Liberty Waiver Request Appendix A at 5.

<sup>20</sup> Liberty Waiver at 13.

<sup>21</sup> *Id.* at 2-3.

<sup>22</sup> *Id.* at 12–13.

that its operation in the 10 – 40 GHz range will not cause harmful interference to systems operating in the 10 – 20 GHz band.<sup>23</sup>

We seek comment on Liberty’s request. To develop a complete record on the issues presented by this request, the proceeding will be treated, for *ex parte* purposes, as a “permit-but-disclose” proceeding in accordance with Section 1.1200(a) of the Commission’s rules, subject to the requirements under Section 1.1206(b). Liberty filed its petition electronically as a non-docketed proceeding in the Commission’s Electronic Comment Filing System.<sup>24</sup> We have opened a new docket, **ET Docket 23-245** to facilitate consideration of this request and have moved Liberty’s submission into this docket. Parties should file all comments and reply comments in **ET Docket 23-245**

Pursuant to sections 1.415 and 1.419 of the Commission’s rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission’s Electronic Comment Filing System (ECFS). *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <http://apps.fcc.gov/ecfs/>.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.

- Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19.<sup>25</sup>
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L Street, NE, Washington DC 20554.

People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to [fcc504@fcc.gov](mailto:fcc504@fcc.gov) or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

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<sup>23</sup> *Id.* at 13; *see also* Liberty Waiver Request Appendix A at 7-15 (discussing technical parameters of Liberty’s planned system meant to minimize the potential for harmful interference to sensitive services operating in restricted bands (*e.g.*, deployment in limited, indoor locations; using spectrum that does not easily penetrate building walls and rooftops; emissions not directed upwards; and the imposition of waiver conditions requiring coordination if the device is deployed in certain geographic areas)).

<sup>24</sup> Liberty filed in INBOX-PART15 (Petition for Waiver of Part 15), which is our preferred intake for waivers of the Part 15 rules. *See* <https://www.fcc.gov/ecfs/document/104102607228186/1>

<sup>25</sup> *See FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, Public Notice, 35 FCC Rcd 2788 (OMD 2020).

Parties should also send a copy of their filings to Syed S. Hasan, Office of Engineering and Technology, Federal Communications Commission, 45 L Street, NE, Washington DC 20554, or by e-mail to [syed.hasan@fcc.gov](mailto:syed.hasan@fcc.gov).

Documents associated with this docket will be available for public inspection through the Commission's ECFS.

By the Chief, Office of Engineering and Technology

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