

Deere & Company  
File No. 0949-EX-CN-2019  
Exhibit A

**EXHIBIT A – NARRATIVE DISCUSSION  
AND EXPERIMENTAL LICENSE JUSTIFICATION**

Pursuant to Sections 5.3(j) and Section 5.54(a)(1) of the Commission’s Rules, Deere & Company (“Deere”) provides this narrative statement in support of a conventional experimental license to continue operational testing using 3550-3700 MHz Citizens Broadband Radio Service (“CBRS”) spectrum from discrete sites near Deere facilities in Moline, Illinois and three experimental farms nearby in close proximity in Iowa.<sup>1</sup> Deere was originally granted a Special Temporary Authority (“STA”) authorization on May 24, 2019, pursuant to file number 0643-EX-ST-2019, call sign WO9XOA. Deere seeks to extend that STA through this conventional experimental license for a period of 12 months beginning as soon as possible but no later than December 15, 2019.<sup>2</sup>

Consistent with Commission Rules, grant of the requested experimental license will further Deere’s operational testing of the CBRS band.<sup>3</sup>

[REDACTED]

[REDACTED]

[REDACTED]

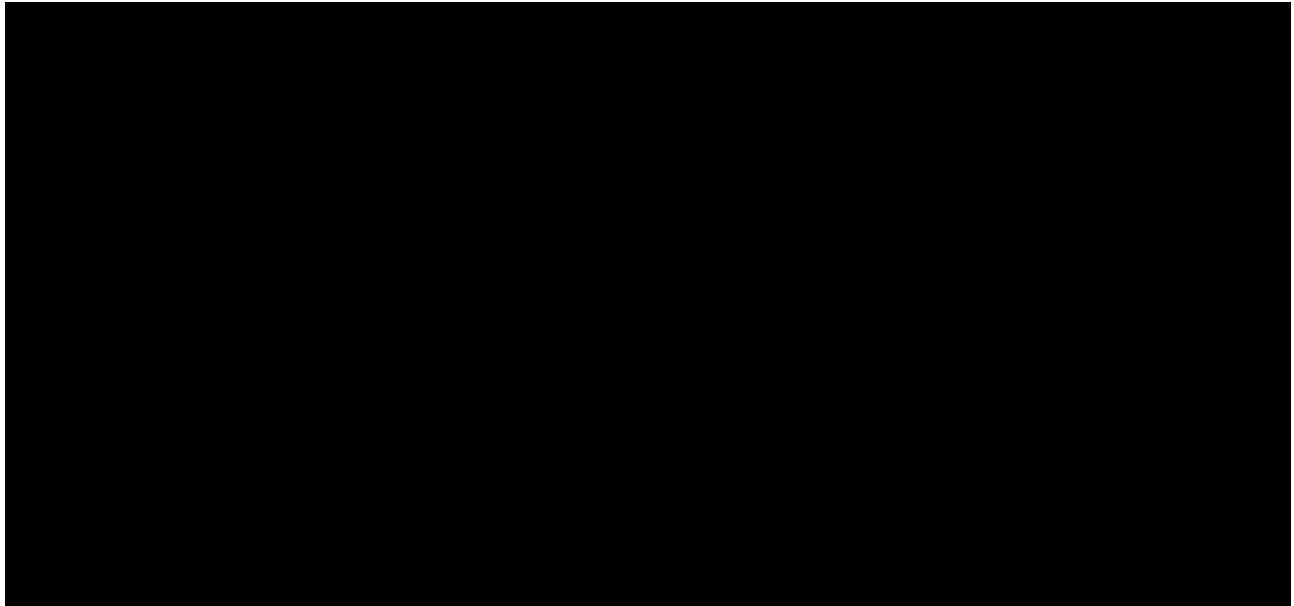
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<sup>1</sup> 47 CFR §§ 5.3(j) & 5.54(a)(1).

<sup>2</sup> Pursuant to § 5.61(c), Deere has applied for an extension of 0643-EX-ST-2019 during the pendency of this application.

<sup>3</sup> 47 CFR § 5.3(j).

[REDACTED]



The proposed locations in Illinois and Iowa continue to represent optimal experimental license test site for CBRS 3550-3700 MHz spectrum. Among other characteristics, these test sites enjoy flat topographies that facilitate line-of-sight transmission with minimal links. Moreover, Deere has an extensive presence in the region, which will facilitate the installation and maintenance of equipment under test.

Deere's continued testing does not represent an interference threat to incumbent operations. The test sites are located hundreds of miles from coastal radar operations, far outside Part 96 exclusion zones. No international ground stations requiring protection in the 3650-3700 MHz band operate in Illinois or Iowa.<sup>5</sup> Deere will continue to coordinate with Wireless Broadband Services ("WBS") operated under Subpart Z of the Commission's Part 90 Rules.<sup>6</sup> Deere will also continue to comply with the power levels in Section 96.41. As described in Exhibit B, Deere will also continue to provide a 24/7 point of contact with "kill switch" capability in the unlikely event of harmful interference with incumbent users.

Exhibit B provides the unit volume and technical characteristics for the experimental license station sites proposed by Deere for the instant application. Deere requests continued authority for the minimal number of devices needed to evaluate the viability of the 3550-3700 MHz to support next generation IoT applications. Moreover, all equipment proposed to be used by Deere pursuant to this experimental license complies with adopted CBRS rules.

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<sup>5</sup> See <https://transition.fcc.gov/bureaus/ib/sd/3650/grandftr.pdf> (last visited 11/8/2019).

<sup>6</sup> See 47 C.F.R. §§ 90.1301, *et seq.*

**REDACTED  
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For the foregoing reasons, Deere respectfully requests that the Commission expeditiously grant the requested experimental license extension.