

**EXHIBIT A – REASON FOR SPECIAL TEMPORARY AUTHORITY**

Deere & Company (“Deere”), pursuant to Section 25.120(b)(3) of the Commission’s Rules, 47 C.F.R. § 25.120(b)(3), hereby requests special temporary authority (“STA”) for a follow-on period of 60 days to operate receive-only, non-common carrier, mobile earth stations operating in the L-band to downlink transmissions from Inmarsat geostationary satellites at 15.5° and 54° west longitude and 178° east longitude (collectively “Inmarsat Satellites”).<sup>1</sup> The Commission granted Deere STA for an initial 60-day period on November 7, 2014 (File No. SES-STA-20141030-00836), and extended STA for subsequent 60-day periods on January 7, 2015 (SES-STA-20141217-00909) and May 27, 2015 (SES-STA-20150227-00104; SES-STA-20150501-00286), July 10, 2015 (SES-STA-20150701-00435), September 18, 2015 (SES-STA-20150916-00587), and November 20, 2015 (SES-STA-20151114-00842). Deere requests the instant follow-on authority to begin no later than January 20, 2016. Specifically, Deere requests STA for its existing network of mobile earth terminals (“METs”) operating under Call Sign E010011 to receive 2.5 kHz space-to-earth emissions (designator 2K50D1D) from the Inmarsat Satellites at the following center frequencies.<sup>2</sup>

**Table 1.0 - Amended StarFire L-band Frequencies**

<b>Geostationary Arc Position</b>	<b>Center Frequency (MHz/Space-to-Earth)</b>
54 west longitude	1545.9775
15.5 west longitude	1545.9875
178 east longitude	1545.9875

Since 2001, Deere has been enabling domestic agricultural equipment with its StarFire precision farming system. The StarFire system employs receive-only vehicle mounted mobile earth stations. These earth stations receive L-band space-to-earth emissions from Inmarsat geostationary satellites that provide correctional data. This data augments the navigational information the StarFire terminals receive simultaneously from Global Positioning System (“GPS”) satellites. This augmented system enables the operators of domestic farming equipment to pinpoint their location to within +/- 2.5 centimeters.<sup>3</sup> This precise positioning capability developed originally to assist farmers in comparing the crop yields from various fields to determine, among other things, the amount of fertilizer and seed appropriate for a particular field and crop, has now found additional important uses to improve farming efficiency, including enabling farmers to manually record observations such as weed patches, crop appearance, and

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<sup>1</sup> All involved Inmarsat spacecraft have been approved to serve the United States, and are reflected on the Commission ISAT list.

<sup>2</sup> No changes have been made to the frequencies or technical parameters already approved in SES-STA-20141030-00836.

<sup>3</sup> Navigational accuracy depends on several variables, including visibility to overhead satellites and other supplemental transmitters providing correctional data.

other field variables with remarkable precision. In addition, among other benefits, when coupled to the vehicle steering system through the Deere AutoTrack system it aids the operator to steer a more precise path when making repeated passes over the same track, thus greatly reducing crop and soil damage.

Follow-on STA is needed because Deere was recently notified by Inmarsat that StarFire L-band downlink signals in North America would transition to frequencies identified above in Table 1.0.<sup>4</sup> Grant of STA will serve the public interest by ensuring continuity of service for thousands of existing Deere StarFire customers during the pendency of Deere's concurrently filed permanent applications to modify Call Sign E010011 to receive the above-referenced frequencies.<sup>5</sup> Pursuant to Section 25.120(b)(3) of the rules, Deere requests a 60-day STA without the need for prior public notice. As discussed above, grant of authority is requested on or before close of business on January 20, 2016 so that Deere can continue to provide service to customers without any loss of service.

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<sup>4</sup> Vizada, Inc. ("Vizada") uplinks correctional data on Deere's behalf from earth stations located in Santa Paula, California and Southbury, Connecticut. After the frequency transition, Vizada will continue to provide the same uplink services.

<sup>5</sup> Application Submission IDs: IB2014002165.