

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 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 98° west longitude and 143.5° east longitude (collectively “Inmarsat Satellites”).¹ Deere requests the instant authority to begin no later than March 22, 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.²

Table 1.0 - Amended StarFire L-band Frequencies

Geostationary Arc Position	Center Frequency (MHz/Space-to-Earth)
98 west longitude	1545.9675
143.5 east longitude	1545.9775

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.³ 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 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.

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

² Deere was previously granted authority to receive space-to-earth emissions from additional Inmarsat satellites. See IBFS File No. SES-MOD-20141030-00835 (granted Jan. 29, 2016). Deere has filed an application to modify Call Sign E010011 to receive the additional frequencies referenced in Table 1.0. See IBFS File No. SES-MOD-20160226-00184 (filed Mar. 1, 2016).

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

Grant of STA will serve the public interest by ensuring continuity of service for existing Deere StarFire customers during the pendency of Deere's concurrently filed permanent application to modify Call Sign E010011 to receive the above-referenced frequencies.⁴ 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 March 22, 2016 so that Deere can continue to provide service to customers without any loss of service.

⁴ See IBFS File No. SES-MOD-20160226-00184.