## 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 at the following center frequencies already authorized under Call Sign E130083 from Inmarsat geostationary satellites (collectively "Inmarsat Satellites").

Satellite Identifier	Geostationary Arc Position	Emission	Center	Granted Authority to Serve the United States
identiller	Position	Designator	Frequency (MHz)	United States
Inmarsat 3F4	54 west longitude	2K50D1D	1545.9775	SAT-PPL-20090107-00003;
				SATAPL- 20090115-00005
				(granted April 10, 2009)
Inmarsat 3F2	15.5 west longitude	2K50D1D	1545.9875	DA 08-2323, 23 FCC Rcd 15268
				(Int'l Bur. rel. Oct. 21, 2008)
Inmarsat 3F3	178 east longitude	2K50D1D	1545.9875	DA 08-2323, 23 FCC Rcd 15268
				(Int'l Bur. rel. Oct. 21, 2008)
Inmarsat 4F1	143.5 east longitude	2K50D1D	1545.9775	Public Notice, Report No.
				SES-01097
				(Int'l Bur. rel. Dec. 24, 2008)
Inmarsat 4F3	98 west longitude	2K50D1D	1545.9675	SAT-PPL-20141003-00106
				(granted Jan. 8, 2015)

Specifically, Deere requests STA for its SF6000 and SF5050 mobile earth terminals ("METs") to receive 2.5 kHz space-to-earth emissions (designator 2K50D1D) from the Inmarsat Satellites at the above-referenced center frequencies during the pendency of a concurrently filed modification application seeking to permanently add these METS terminals to Call Sign E130083.<sup>2</sup> Deere requests the instant authority to begin no later than June 9, 2016.

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

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

<sup>&</sup>lt;sup>2</sup> See IBFS File No. SES-MOD-201601229/ (filed June 2, 2016).

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

Deere & Company Receive-Only Mobile Earth Station Application for STA Exhibit A

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.

Grant of STA will serve the public interest by ensuring continuity of service for existing Deere StarFire customers that elect to upgrade or replace older generation StarFire terminals during the pendency of Deere's permanent application to modify Call Sign E130083 to add the above-referenced terminals. 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 June 9, 2016 so that Deere can provide service to customers without any gap in continuity.