

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:
STA extension to receive from Inmarsat 2F1 at 142 degrees west

1. Applicant

Name:	Deere & Company	Phone Number:	310-381-2755
DBA Name:		Fax Number:	310-381-2001
Street:	20780 Madrona Ave.	E-Mail:	pwilliams@navcomtech.com
City:	Torrance	State:	CA
Country:	USA	Zipcode:	90503 -3777
Attention:	Dr. Peter Williams		



File # SES-STA-20090715-00865

Call Sign E010011 Grant Date 8/3/09
(or other identifier)

Term Dates
From 7/16/09 To: 9/13/09

Approved: Kathleen Medley

Chief Satellite Engrs. Br.

9. State	10. Longitude (dd mm ss.s h) 0 0 0.0
11. Please supply any need attachments. Attachment 1: Exhibit A Attachment 2: Exhibit B Attachment 3:	
12. Description. (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.) <div style="border: 1px solid black; padding: 5px; margin: 10px 0;">Deere & Company seeks extension of special temporary authority to operate up to 10,000 receive-only non-common carrier mobile earth terminals operating in the L-Band to downlink transmissions from Inmarsat's 2F1 satellite located at 142 degrees west longitude.</div>	
13. By checking Yes, the undersigned certifies that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application"; for these purposes. <input checked="" type="radio"/> Yes <input type="radio"/> No	
14. Name of Person Signing Dr. Peter Williams	15. Title of Person Signing Director, Advanced Programs
WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT (U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).	

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THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.

EXHIBIT A – EXTENSION OF SPECIAL TEMPORARY AUTHORITY

Deere & Company (“Deere”), pursuant to Section 25.120(a) of the Commission’s Rules, 47 C.F.R. § 25.120(a), hereby requests extension of special temporary authority (“STA”), File No. SES-STA-20090515-00591, for a period of 60 days, from July 16, 2009 to September 14, 2009, to operate receive-only, non-common carrier, mobile earth stations operating in the L-band to downlink transmissions from Inmarsat’s 2F1 geostationary satellite located at 142° west longitude (“2F1”).¹ Specifically, Deere requests an extension of its STA for its existing network of mobile earth terminals (“METs”) operating under Call Sign E010011 to receive a 2.5 KHz downlink carrier (emission designator 2K50D1D) from the 2F1 utilizing 1,535.1525 MHz as the carrier’s center frequency. Authorization is sought for up to 10,000 METs, the same METs already approved for Station E01011.

Since 2001, Deere has been equipping domestic agricultural equipment with its GreenStar™ precision farming system. The GreenStar™ system employs receive-only vehicle mounted StarFire™ mobile earth stations. These earth stations had been receiving L-band signals from the Inmarsat 3F4 geostationary satellite at 142° west longitude (“3F4”), and provide correctional data which enhances the information the GreenStar™ systems receives simultaneously from Global Positioning Satellites (“GPS”). This system enables the operators of domestic farming equipment to pinpoint their location to within twenty (20) centimeters ($\pm 1\sigma$). 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, 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.

Extension of STA is needed because Deere’s service on the Inmarsat 3F4 satellite at 142° west longitude was switched to the 2F1 on November 22, 2008.² Grant of the extension will serve the public interest by preventing thousands of existing Deere GreenStar customers from losing service. If the customers do not receive service, the fuel efficiency of agricultural equipment enabled with StarFire terminals will decrease, and the likelihood increases substantially that the customers’ equipment will over fertilize. Pursuant to Section 25.120(b)(3) of the rules, Deere requests a 60-day extension of the STA without the need for prior public notice. On December 16, 2008, Deere filed an application for regular authority to receive service from the 2F1. File No. SES-MFS-20081216-01619.

¹ Technical information for the 2F1 is contained in the Schedule S for application File No. SAT-APL-20090609-00068 filed by Inmarsat plc (“Inmarsat”) on June 9, 2009.

² The uplink to the Inmarsat 3F4 was being provided to Deere by Vizada from an earth station located in Santa Paula, California. After the cutover, Vizada has continued to provide the same uplink services. See Vizada applications File Nos. SES-MFS-20081029-01425, SES-AMID-20081215-01614 and SES-STA-20081029-01427.

Deere & Company
Receive-Only Mobile Earth Station Extension of STA
Prior STA File No. SES-STA-20090515-00591
Exhibit B

EXHIBIT B- FAA COMPLIANCE

Pursuant to 47. C.F.R. §17.14 (a) and (b), FAA notification is not necessary because no remote mobile earth station will exceed 6.1 meters in height.