

From: Mark Sanford

To: Leann Nguyen

Date: August 14, 2014

Subject: FCC File# 0365-EX-ST-2014

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Message:

Response Follow-Up to FCC Request for Additional Information

Questions from Leann Nguyen:

From: oetech@fccsun27w.fcc.gov [mailto:oetech@fccsun27w.fcc.gov]

Sent: Tuesday, August 05, 2014 9:19 AM

To: Sanford, Mark

Subject: FCC File# 0365-EX-ST-2014

Applicant: Fugro Earthdata, Inc.

File Number 0365-EX-ST-2014

Correspondence Reference Number: 24766

Date of Original Email: 08/05/2014

FCC 1. Did the proponent actual analysis the flight area to see what frequencies would be impacted, or did your company copied the coordination channels from another, similar record? Because some of the frequencies in the area do not match what is on the STA data. For example, AF 012688 (M282.375) and AF 012687 (M279.65) are in the middle of the flight path but are not notched out in the coordination details. Also, if the user plans to avoid 379.975&ndash;420 MHz, then why is 406.1&ndash;430 MHz still shown on the amended STA?

Response: The P-band portion of the GeoSAR system is designed to radiate from 270MHz to 430MHz. However, the transmit waveform can be notched as needed to prevent interfering with primary users. Historically, we have been required to notch:

1. The ILS band (328.600&ndash;339.813 MHz),
2. The DOJ band (379.975&ndash;420.000 MHz) and more recently,
3. The band from 292.000&ndash;317.000 MHz.

These portions of spectrum are routinely notched for all but the most remote portions of the US, for example north of the arctic circle in the Beaufort Sea (north of Barrow, Alaska). The fewer the notches, the greater the quality of the mapping data, so fewer notches are better.

In addition to these (more or less) standard notches, we also have been required to notch additional site specific channelized frequencies as provided by the NTIA, which maintains the database of primary users. Fugro Geospatial (EarthData) does not have direct access to this database; hence, we have relied on the NTIA to provide the additional site specific notching requirements. Historically, the NTIA coordinated notching requirements across the various governmental agencies, providing a single notch list, which we implement.

In the original request, we provided a &ldquo;Two-Pager&rdquo; attachment, which summarized the proposed acquisition plan, including the region within which notching is deemed necessary (based on the in-flight EMI testing of the system during the Stage-4 licensing process).

FCC 2. Another concern that the FAA expressed to NTIA as recently as last year is the proponent's need to provide frequency deconfliction with the proposal for GeoSAR (or any other UHF band synthetic aperture radar). This is the way it was done in the past when the DOD submitted these requests.

Response: Yes, the FAA&rsquo;s comment reflects the protocol under which GeoSAR has been operating since CY2003, as a stage-4 secondary user in this band. The FAA&rsquo;s concern has been addressed from the very beginning, and the agreed upon protocol was for the NTIA to be the clearinghouse for frequency deconfliction.

In addition to notching the entire ILS band, GeoSAR also notches the specified air traffic volume control frequencies in use in the site area. As referenced above, historically the NTIA provided the database

search results and cross agency deconfliction, providing these additional notching requirements.