

To: Austin Williams  
E-Mail: Austin@Tyvak.com  
From: Leann Nguyen  
Date: July 25, 2016

Subject: Request for Info - File # 0398-EX-PL-2016

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Message:

Below is IB statement. Please make a correction your information and updated them as soon as possible

"We found some technical inconsistencies/discrepancies between the Narrative Exhibit document, Form 442, and SpaceCap API file.

- In page 5 of the Narrative, it talks about the use TT&C and inter-satellite communications UHF system; the terms "inter-satellite communications" in spectrum management is define as a space-to-space communication; can the applicant please clarify if they plan to operate an inter-satellite links or they meant to say up and down link communication.

- Page 6 of the Narrative, it provides earth station parameters (gain 20.2 dBi, 30 deg; linear (H,V) or CR (uses 4 yagi antenna array); elev range 10 to 170 deg; azimuth 0 to 360 degrees); however, form 442 does NOT contain any earth station location or parameters; we will need all the earth station added to form 442 before the Grant is issue.

- related to the questions above, the SpaceCap API file has an earth station antenna gain of 16.2 dBi; can the applicant please verify the number of earth station(s) and associated antenna gain in both form 442 and SpaceCap API;

- the SpaceCap API file has the minimum elevation angle of 5 degrees but the Narrative Exhibit shows a 10 degrees; can the applicant please verify which is the correct minimum elevation angle and update the SpaceCap API file.

- In the Narrative document, the UHF 399.9-400.05 MHz requires up to 50 kHz bandwidth to compensate for Doppler shift effect but the emission designator is 40.9 kHz (40K9G1D) [page 10]; perhaps the applicant should consider marking the emission designator 50K0G1D since it is the bandwidth requirement;

- In the Narrative document [page 10-11], the earth station maximum power is shown to be 200 watts; however, the SpaceCap API earth station max power is 3 watts; this could probably be a mistake; applicant please verify the appropriate max power value in both form 442 and SpaceCap API file and make the appropriate changes.

- SpaceCap API file has an emission designator of 16K5G1D which does is not encompass within the emission in Form 442 and the Narrative doc; applicant please updated the SpaceCap API file as appropriate.

- since applicant is planning to add additional earth station locations, we would suggest to have the earth station as a typical earth station(s) in the SpaceCap API filing with associated technical parameters were the new earth station can be encompass within the ones describe as typical.

- other minor inconsistency we found in the SpaceCap API file the antenna polarization that didn't match with the narrative exhibit document;

The items indicated above must be submitted before processing can continue on the above referenced

application. Failure to provide the requested information within 30 days of July 25, 2016 may result in application dismissal pursuant to Section 5.67 and forfeiture of the filing fee pursuant to Section 1.1108.

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