

From: James Coyle

To: Travis Nguyen

Date: July 16, 2021

Subject: FCC-File No:0561-EX-CN-2021

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Message:

1. Justification for using entire AWS spectrum at a super high power, 70 dBW.

Our antenna is a 13 meter dish with an approximate gain of 48dB, this coupled with an amplifier that is transmitting at 250W will translate to an EIRP of approx. 70dBW. Our EIRP requirements are given to L3Harris Datron by US gov's programs and our objective is to transmit power to test our operational requirements and monitor for noise level degradation.

2. More detailed technical information such as antenna patterns, antenna direction etc.

(I am unable to send a simulated pattern plot via this medium but can produce one by sending an attachment)

Antenna 10 dB beamwidth(deg) = 0.77. This information is computed with a 13M reflector at 2025 MHz.

The Antenna far field is 2283.9 meters.

Antenna will be directed towards the zenith position, 90 deg elevation.

3. Why do you need that high level of power, 10,000,000 watts EIRP, associate with non-modulated signal scheme, NON ?.

Please refer to the response given in question 1, we are transmitting solely to monitor the integrity of our receive channel and transmit channel. Please note that the power level of the HPA combined with the antenna gain produces the total power levels as mentioned.

4. An engineering analysis and explanation of how it would specifically avoid causing harmful interference to incumbent AWS operations.

We will also be transmitting at zenith as to minimize the chance of interference.

5. Any stop buzzer information just in case interference occurs?.

We plan to contact local wireless carriers to let them know we will transmit prior to transmit operation. The carriers will have phone number to contact us should interference happen the moment it should occur.