

MOORESTOWN FCC LICENSE KK2XCJ

Moorestown Range Board
6/3/21



FCC SPECIFIC ACTION ITEMS

With respect to CBRS frequencies 3550-3700 MHz, please address the following items:

1. Explanation of how it would coordinate any usage with a Spectrum Access System (SAS).
 2. Explanation of how it would specifically avoid causing interference to incumbent and commercial operations in the band, including General Authorized Access (GAA).
 3. With respect to operations in 3700-3900 MHz band, WTB requests additional information on how the you will avoid causing harmful interference to incumbent operators, including FSS earth stations, in this band.
- A list of registered incumbent? Fixed Service Satellites (FSS) earth stations in the band can be found at the following link: <https://docs.fcc.gov/public/attachments/DA-20-823A2.xls>

LM EMI/EMC ANALYSIS

- License KK2XCJ refers to the Spacefence Integration Test Building and the AEGIS SPY1 Test Facilities.
- A high-level EMI/EMC assessment has been performed to analyze potential impacts of Spacefence and SPY1 as a source and 5G base stations (BS) and user equipment (UE) as victims.

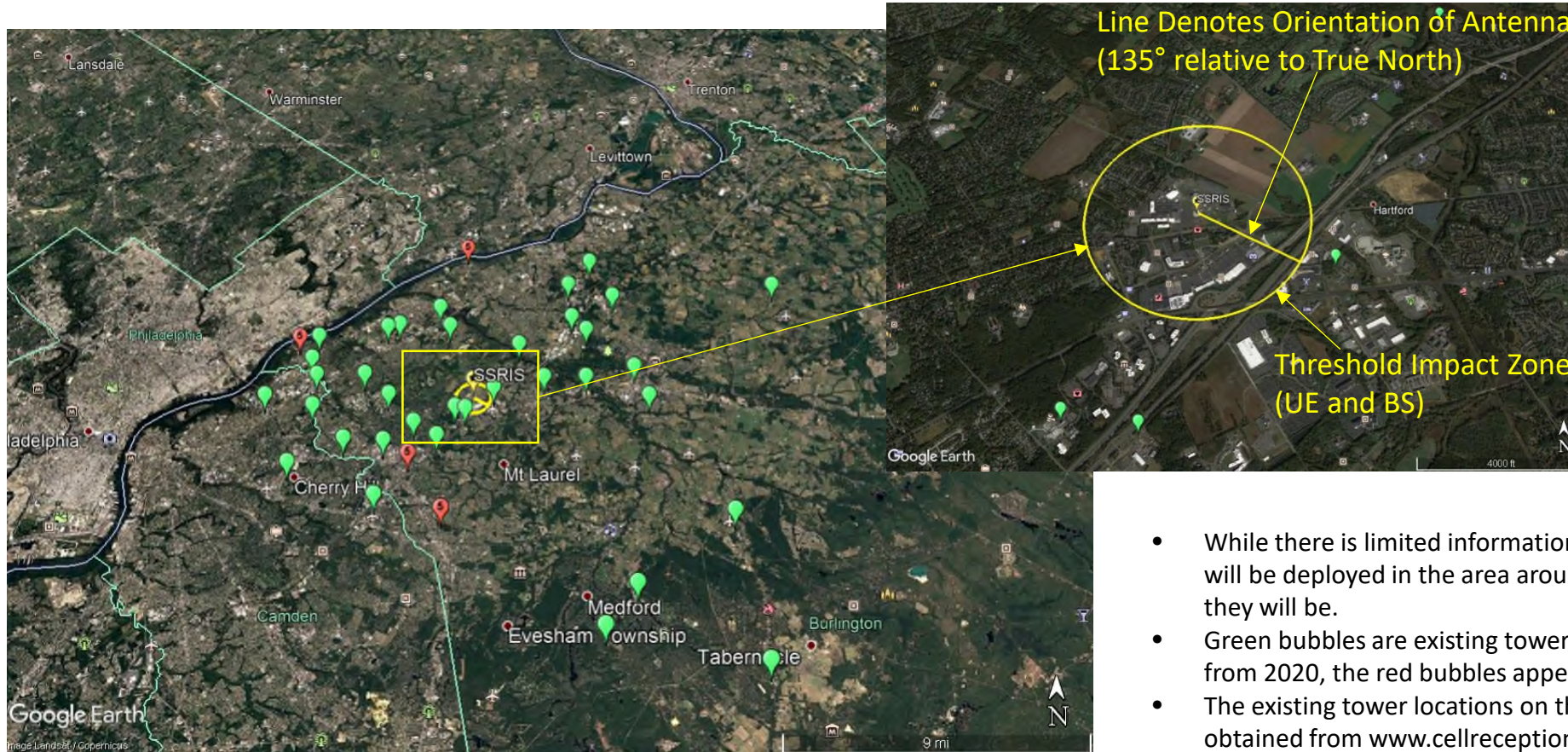
FCC AI#1 -USE OF SAS

- Due to the classified nature of some of the parameters, LM cannot provide details in an unclassified setting.
- LM does not expect to require the use of SAS, for Spacefence or SPY1, in regards to potential impacts to 5G systems operating in the CBRS band.

FCC AI#2 EMI MITIGATION

- The 5G 3GPP specifications that were evaluated for this EMI analysis were:
 - BS- blocking
 - UE- maximum power input and blocking
- A preliminary stay-out zone for License WH2XUI has been determined to avoid impacts to 5G CBRS devices.
- For License KK2XCJ
 - Spacefence is bounded by the same geographic area of impact as WH2XUI
 - SPY1 preliminary analysis predicted a 3x larger geographic area of impact than WH2XUI considering its power level,
 - but its duty cycle is small enough that the overall impact should be benign.

FCC AI#2 EMI MITIGATION (WH2XUI)



- While there is limited information that 5G midband frequencies will be deployed in the area around SSRIS, the analysis assumed they will be.
- Green bubbles are existing towers. Based on Google Earth images from 2020, the red bubbles appear to be future 5G sites.
- The existing tower locations on the Google Earth view were obtained from www.cellreception.com/towers which claims that it obtains these towers from FCC registrations. The 5G sites were found on www.speedtest.net/ookla-5g-map

CURRENT CELLULAR LANDSCAPE – AI#3

- Due to the classified nature of some of the parameters, LM cannot provide details in an unclassified setting. However, LM does not expect discernable EMI with Spacefence or SPY1 as a source and FSS as a potential victim.

LOCKHEED MARTIN

