Higher Ground Interference
Threat to 6 GHz Band
April 26, 2017
OVERVIEW

• Substantive arguments
  • The probability and the risk of interference is significant
  • HG’s proprietary interference avoidance methodology is untested, and post-hoc remedies for interference are insufficient to protect mission critical communications

• Procedural arguments
  • Waiver standard not met
  • Rulemaking should have been conducted

• Contrary to the record and Congressional intent
  • The record overwhelmingly opposed the waiver
  • HG is controversial and complex
Probability/Risk of Interference

• Tens of thousands of microwave stations in the 6 GHz band, including public safety and utility operations – all supporting mission critical communications including 911 services.

• High probability that HG operations will be in close proximity to microwave receivers.
Interference Protections are Insufficient

- HG’s interference avoidance methodology is untested and unproven.
  - Several technical flaws have been identified.
    - Faulty assumptions about microwave operations
    - Inaccurate ULS Data; failure to account for passive and non-passive sources of reflection.
    - Underestimated calculations of the power/geographic range of interference.
    - Minimized size of bandwidth of HG’s transmissions.
    - Uncertainty surrounding HG’s analysis based on fixed point-to-point design techniques rather than mobile design techniques.

- Interference will be difficult to investigate and mitigate without prior coordination.

- Remedying interference after the fact will be too late to prevent impact to protect safety, reliability and security.
Procedural Issues

• HG failed to meet the FCC test for a waiver.
  • The underlying purpose of the rule is not advanced by granting a waiver here, nor is it in the public interest to do so.
  • No unique circumstances or undue burden here.
• A rulemaking should have been conducted.
  • Adequate notice and opportunity for comment.
  • Better record upon which to render a decision.
Decision contradicts the record and Congress

• Comments overwhelmingly opposed HG’s request for waiver and its application.

• Contradicts the instructions of congressional leaders to avoid deciding controversial or complex matters during the Transition.