

Directional Antenna Information and Modulating Signal Description

UMBRA

File #0305-EX-ST-2021

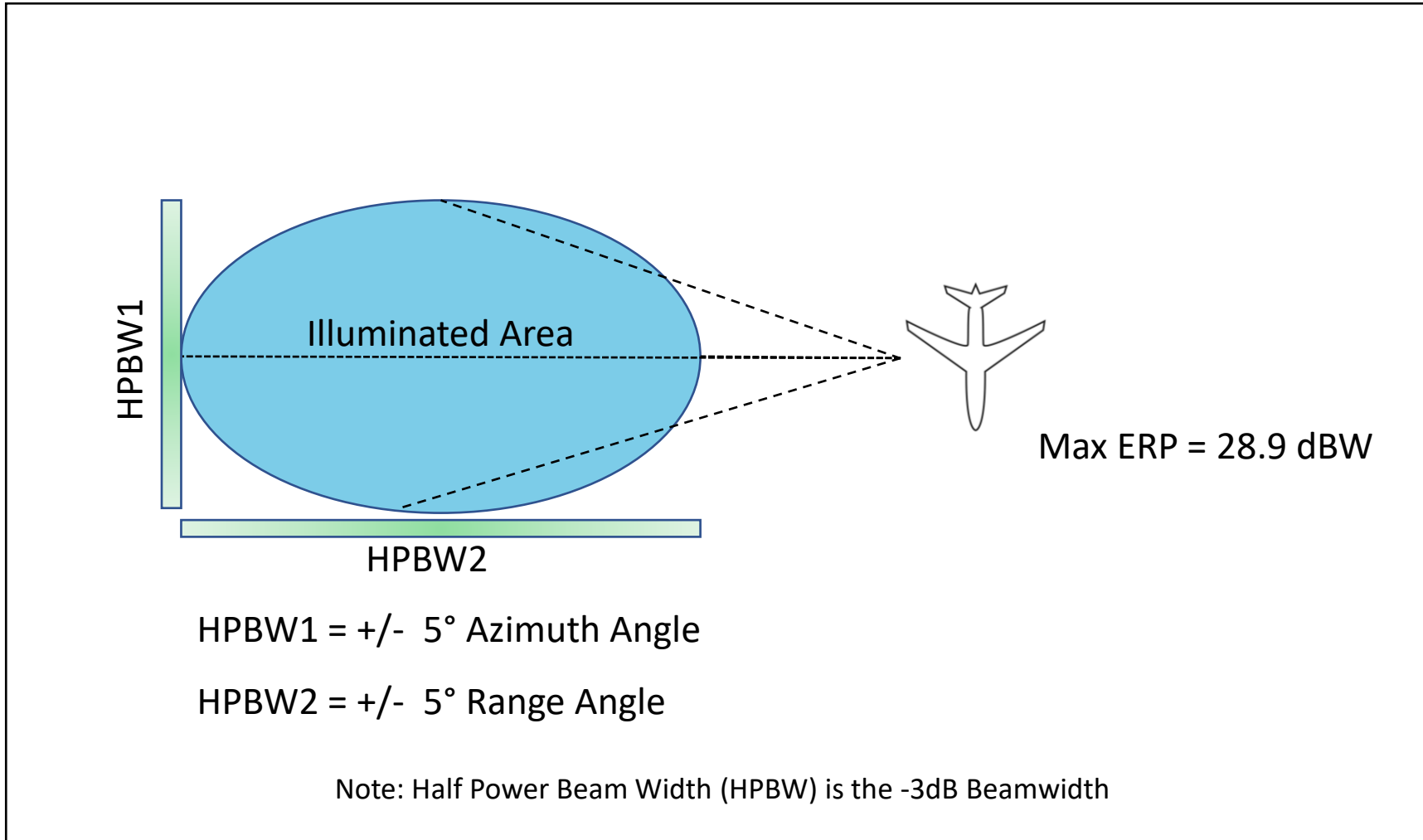
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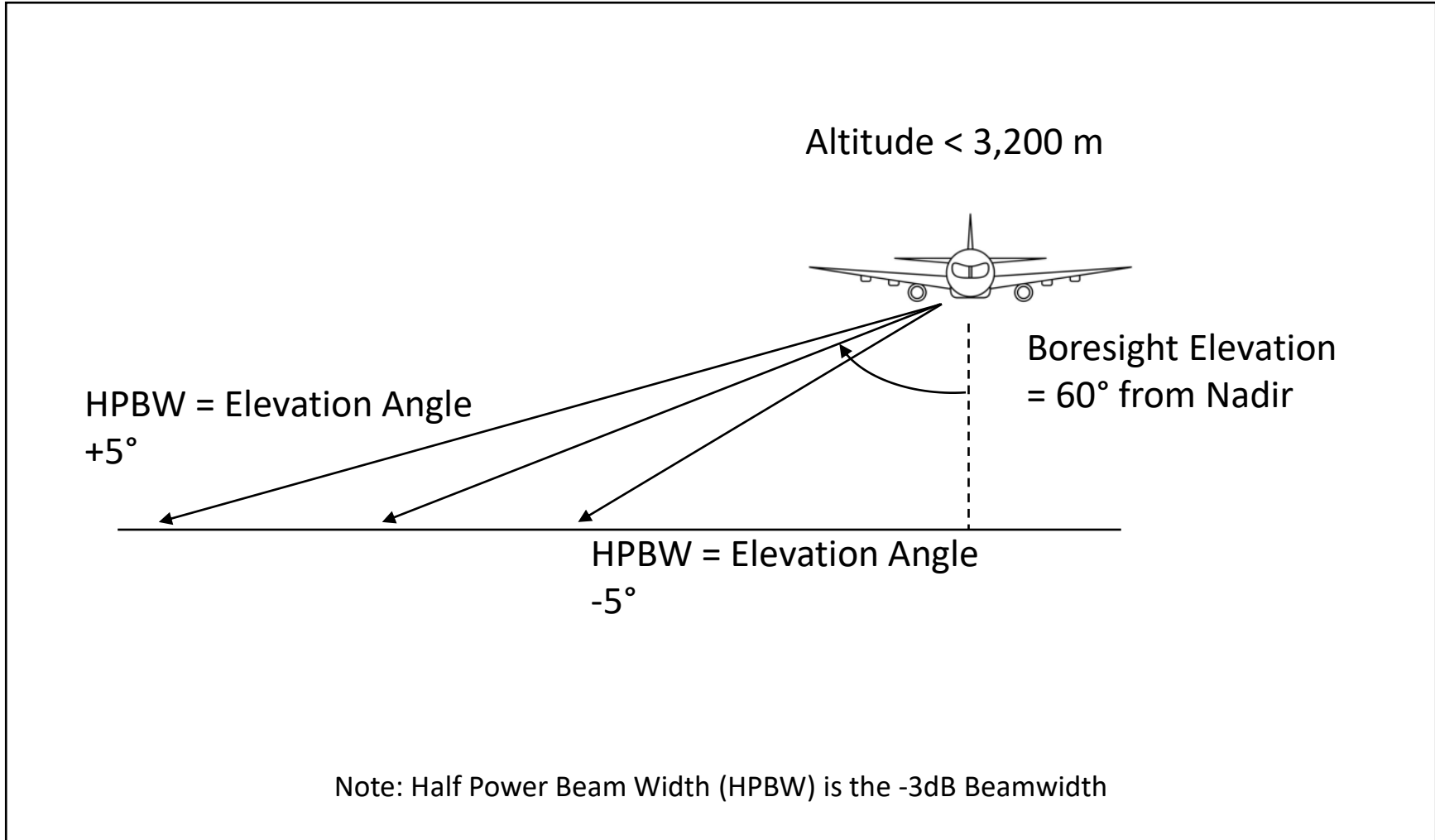
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Top Down View



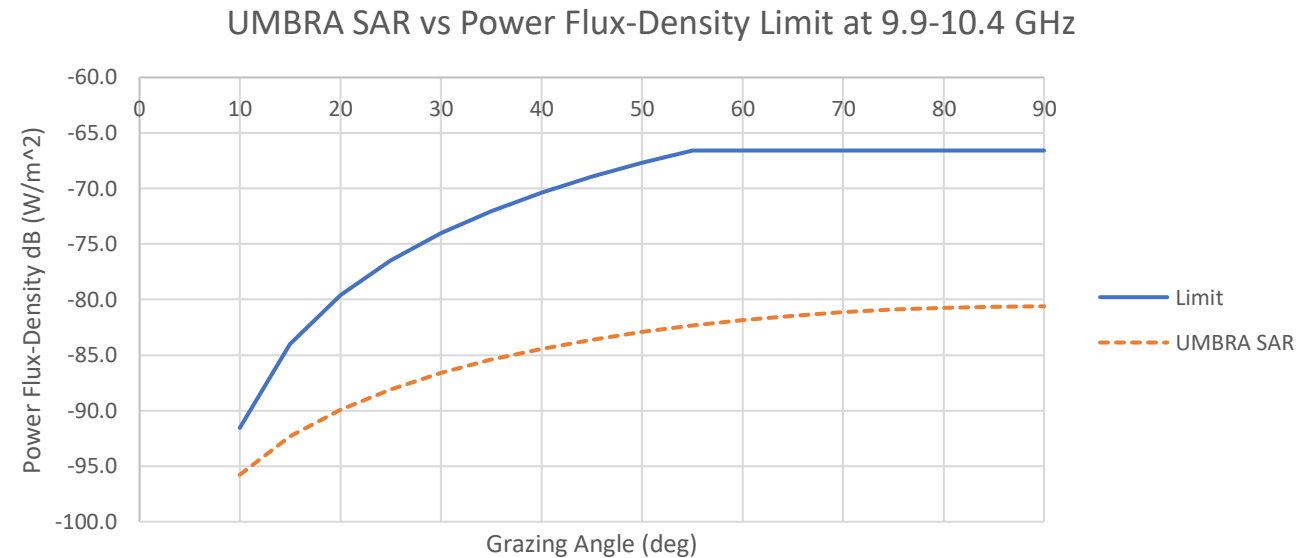
Side View

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Modulating Signal Description

- **Modulation**
 - Linear Frequency Up-chirp or Down-chirp of carrier
- **Modulated Signal Bandwidth = 600 MHz baseline (1200 MHz max)**
- **PRF = 2,000 to 12,000 Hz**
- **Duty Cycle < 30%**
- **Power Flux Density**
 - Set to well below ITU limits for the SAR Band*
 - This closely mimics our approved operation per File # 0424-EX-CN-2020



*Reference Table 12-4: https://www.itu.int/dms_pub/itu-r/opb/act/R-ACT-WRC.12-2015-PDF-E.pdf