

Attachment for:

STA Confirmation Number: EL981534
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Description of radar

The Numerica Spyglass radar configuration is four (4) 90-degree panels for 360-degree coverage. The radar transmits 64 W of peak power, and has a 33% duty cycle, for 21W average power. The antenna gain is 25.6 dBi, which leads to an average ERP of 3.33kW (10kW peak).

Modulating waveform description

The radar waveform is a standard linear frequency modulated (LFM) pulse train with a pulse duration of 16 us pulse and 64 us pulse repetition interval. The pulse bandwidth is 20 MHz.

Intended Method of Operation

Liteye intends to operate the radar at a test site owned by Black Sage Technologies in either a 90, 180, or 270 degree configuration to avoid interference with Surface Detection Equipment which may be located at the Boise airport and Mountain Home Air Force Base. The radar will be located 15.8 km south of the airport and operated stationary (non-moving). Centerline of radar is 4.3 meters (14 feet) AGL. This puts the radar at 50 km NW of MHAFB.

Terrain Profile

The terrain profile shown in Figure 1 indicates a non-line-of-sight path between BOI and the Black Sage Test site. The elevation of BOI is approximately 863 m AMSL, the Black Sage Test Site is approximately 897 m AMSL, with a terrain feature of 971 m AMSL approximately 6.5 km south of BOI.

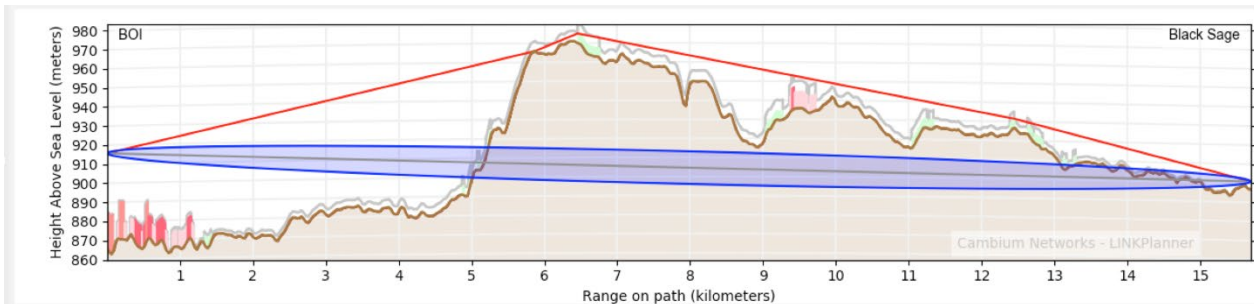


Figure 1 - Terrain Profile BOI to Black Sage

The terrain profile shown in Figure 2 indicates a non-line-of-sight path between MHAFB and the Black Sage Test site. MHAFB is approximately 911 m AMSL, the Black Sage Test Site is approximately 897 m AMSL, with a terrain feature of 992 m AMSL approximately 29 km NW of MHAFB.

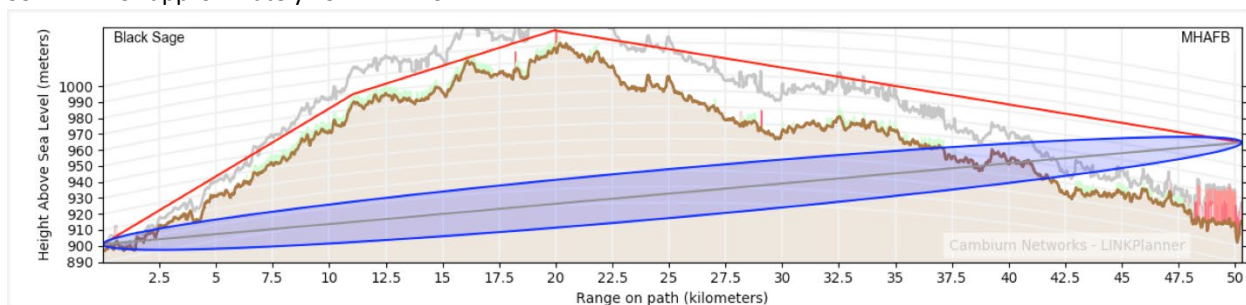


Figure 2 - Terrain Profile MHAFB to Black Sage

Figure 3 shows the high points along each path as indicated by yellow triangles.

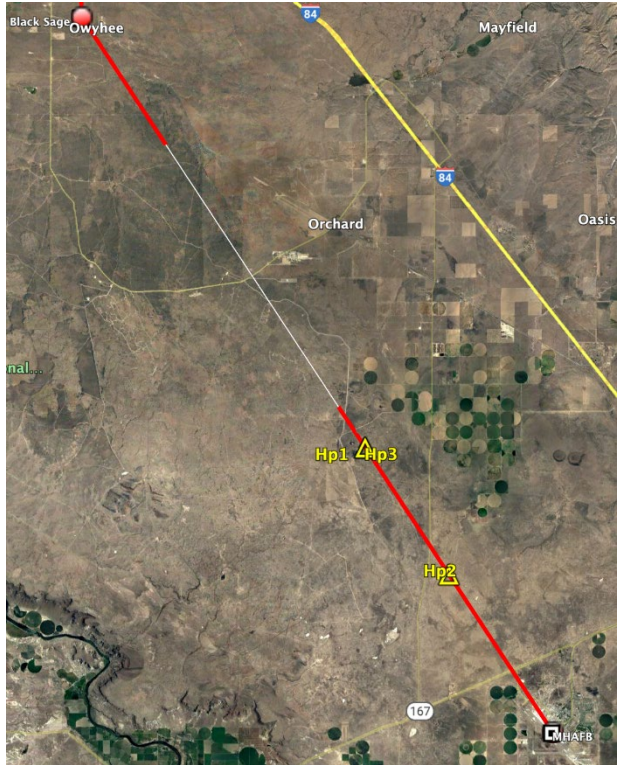


Figure 3 - Views showing high points along paths