

Pathloss

Path design tool for radio links operating in
the frequency range from 30 MHz to 100 GHz

This Certifies That

STEVEN SCIOTTO

has successfully completed the

Pathloss - Version 5.0

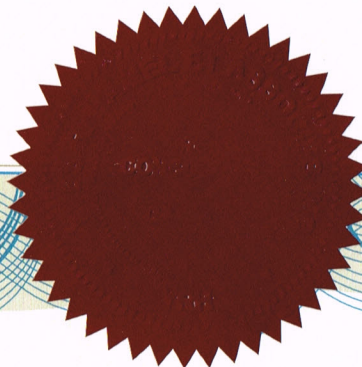
training course as prescribed by

Yves R. Hamel et Associés Inc.

December 8, 9, 10, 11, 2015

YRH

Broadcast and Telecommunications Consultants



A handwritten signature in blue ink, reading "S. Ouellet".

Sonia Ouellet, Eng.

WQJK307 - Sugarloaf Shores

Sky Blue $\geq$ or = -50 dBm

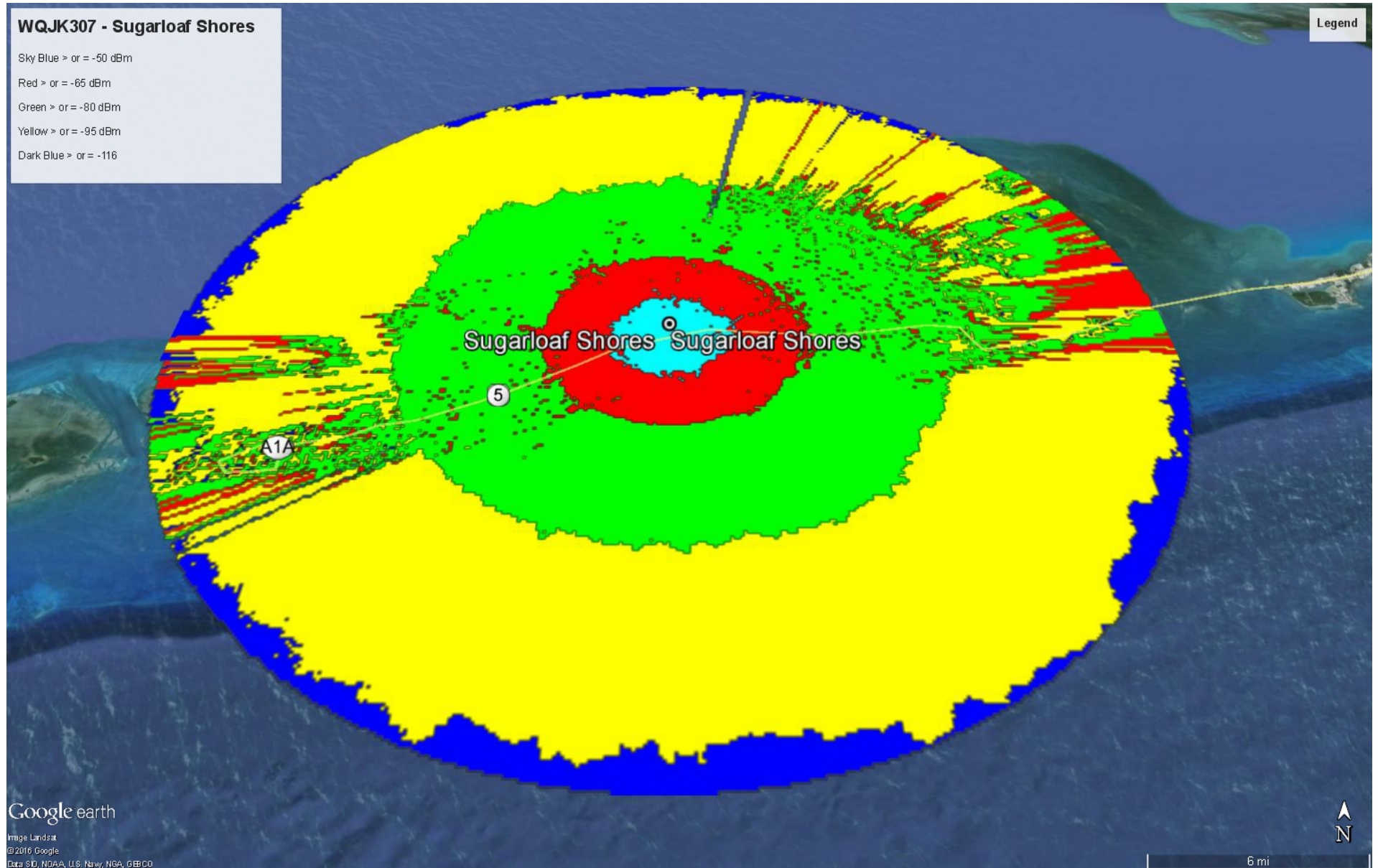
Red $\geq$ or = -65 dBm

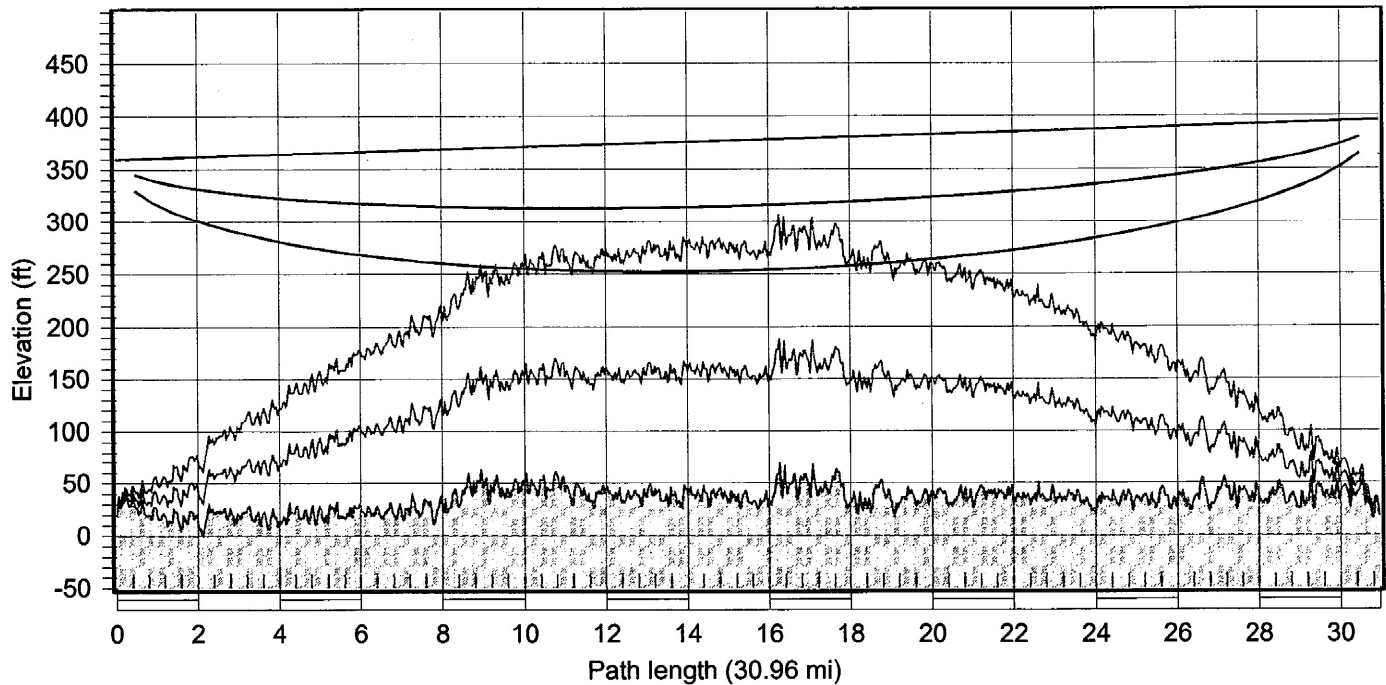
Green $\geq$ or = -80 dBm

Yellow $\geq$ or = -95 dBm

Dark Blue $\geq$ or = -116

Legend





F = 934.00 MHz K = 1.33, 0.67 %F1 = 60.0, 30.0

	Pahokee	Stuart Maint.
Latitude	26 50 08.41 N	27 09 39.20 N
Longitude	080 39 00.65 W	080 18 12.70 W
True azimuth (°)	43.60	223.75
Vertical angle (°)	-0.16	-0.18
Elevation (ft)	18.00	17.40
Tower height (ft)	299.90	450.00
Antenna model	PR-950 (TR)	PR-950 (TR)
Antenna gain (dBi)	18.00	18.00
Antenna height (ft)	341.80	378.09
TX line model	LMR 900	LMR 900
TX line length (ft)	350.00	350.00
TX loss (dB)	7.65	7.65
RX loss (dB)	7.65	7.65
Radio model	Aprisa FE	Aprisa FE
TX power (dBm)	32.00	32.00
EIRP (dBm)	42.35	42.35
Receive signal (dBm)	-73.37	-73.37
Thermal fade margin (dB)	28.63	28.63

	Pahokee	Stuart Maint.
Effective fade margin (dB)	28.63	28.63
Annual 2 way multipath availability (%)	99.94329	
Annual 2 way multipath unavailability (sec)	17883.65	

Multipath fading method - Vigants - Barnett
Rain fading method - Rec. ITU-R P.530-8/13 (R837-5)