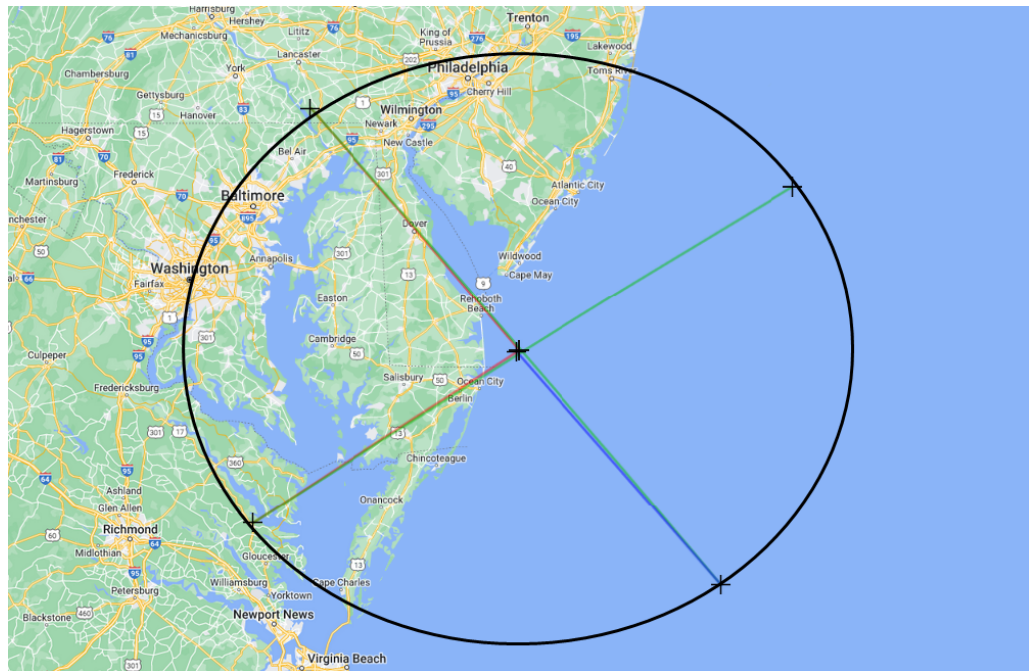


### System Description and Antenna Information

The purpose of this operation is to test and verify microwave band communication functionality with data links. This is a bi-directional, air to ground, high frequency Tx/Rx communications system designed to operate over a wide bandwidth. Testing will focus on the requested fixed frequencies. The airborne system will point to a fixed station on the ground; the ground station will DF to the source and adjust pointing to track the airborne platform. Airborne operations will be over the area depicted below, centered off the Delaware coast at 38-32-20 N; 74-49-18 W, with a radius of operation of 185 kilometers.



Antenna Information: The antenna for Tx/Rx is manufactured by Northrop Grumman, model ENG320K520, with 34.58 dBi gain and main beamwidth of 5.5 degrees. This antenna will be used with dual polarization, H and V. The pointing of the fixed location ground station antenna is software controlled, with the ground station responding to and tracking the airborne platform signal.