

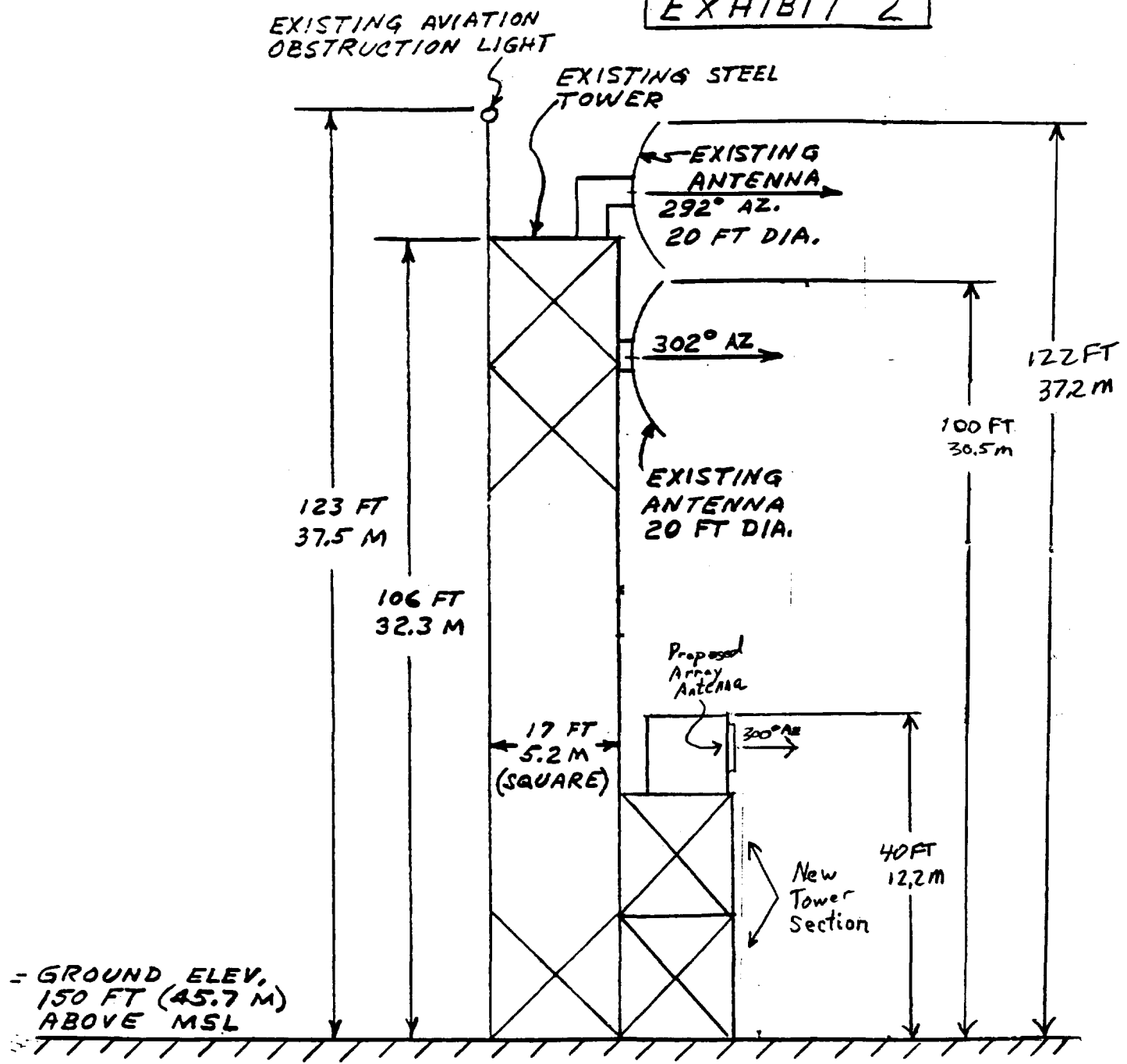
## **Exhibit Number 1**

The goal of this research program is to build and test a dual band radar system that utilizes an active electronically scanned array. The equipment consists of the active array, a signal source, receivers, a digital signal processor, a control computer, and displays. Testing will be conducted at the Westinghouse plant near the Baltimore-Washington International Airport.

The objective of this program is to prove the performance of the dual band active aperture. The system bandwidth (9.5 to 10.5 Ghz and 13.4 to 13.6 Ghz) stresses the components in the active array, particularly the radiator elements, Transmit/Receive modules, and the RF manifolds. The objectives are to characterize the array performance in terms of radiated power, electronic beam steering, and antenna patterns over the dual bands. In addition, the performance of the signal source and receivers will be characterized. The test objectives at the radar system level include characterization of detection and tracking capabilities using both synthetic (electronic) targets and targets of opportunity.

This program advances the state-of-the-art in radar technology by developing and testing radar components that support both transmission and reception over two operating bands.

**EXHIBIT 2**



= GROUND ELEV.  
150 FT (45.7 M)  
ABOVE MSL

AZIMUTH TO NEAREST POINT ON NEAREST RUNWAY (RWY 10) OF  
BWI AIRPORT IS 164°.

TOWER: N. LAT. 39° 10' 46.6137  
W. LON. 76° 41' 23.1505

SCALE 20 FT = 1 IN.

VERTICAL PROFILE OF TOWER  
AT BLUEBERRY HILL TEST SITE