

STATEMENT

The Pennsylvania State University/Applied Research Laboratory has performed all appropriate calculations per OST Bulletin No. 65, Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio-frequency Radiation, as required for our new experimental license application.

The radar system consists of an antenna system comprised of a parabolic aperture antenna, located four feet above the roof of an existing building, directed greater than 45° off azimuth with a 6° - 7° beam width and a transmitter running a maximum of 20.0 watts average power output. Assuming worst-case conditions of transmitting a beam at maximum duty cycle of 1.0Kz and peak pulsed power of 35KW, the radar system will produce an on-axis power density that exceeds the guidelines.

To meet FCC requirements, an eight foot high security fence will be constructed around the perimeter of the roof and the access side. Also, the on-axis power is directed sky-ward to reduce the power concentration. The roof access is a controlled and limited access area. Also, since the antenna is directed upward and is an aperture type, the off-axis power density around the antenna field will be greatly reduced and be below the protection guidelines.