

**PUBLIC INTEREST STATEMENT**

**1. Introduction**

By the instant application (“Application”), Dynetics, Inc. (“Dynetics”) requests that the Commission grant a 2 year conventional experimental license to permit Dynetics to operate the facilities (the “Facilities”) specified in the instant application.

**2. Purpose and Nature of the Operation**

Dynetics, headquartered in Huntsville, Alabama, delivers high-quality, high-value engineering, scientific, and information technology (IT) solutions to customers within the U.S. government and a range of other market segments. Dynetics provides complete lifecycle analysis, engineering, and hardware, to support customer missions.

This experiment – a continuation of the Huntsville, AL and Eglin AFB operations previously authorized under STA (WN9XIR) – involves the testing of a tracking and discrimination radar. This activity is necessary to support DARPA agreement No. HR0011-17-9-0017 (POC: Doug McCreary, 703.526.2193, Douglas.McCreary@darpa.mil).

Regarding Antenna Height:

- Dynetics Huntsville, AL: The radar will be installed at a fixed site on a building rooftop (less than 20 m AGL) or on the ground (less than 5 m AGL). Note that there are superstructures on the building that higher than where the radar will be placed, so the radar is not the highest point on the building and would not itself be a hazard to aviation. When mounted on the ground or on a mobile platform within the stated radius around the Dynetics Huntsville location, the height will be no greater than 5 m AGL. The transmitting facility may be oriented any direction relative to North in azimuth and less than +60° in elevation.
- Eglin AFB (Range B-70), FL: The transmitting facility will mounted stationary on the ground or mounted on a mobile platform within the stated radius and less than 5 m AGL. The transmitting facility may be oriented any direction relative to North in azimuth and less than +60° in elevation. When operating at these locations, Dynetics will coordinate operations with the local authorities.

Additional confidential information regarding the purpose and nature of the experiment is contained at Confidential Exhibit 3.

Waiver of the Station ID rules set forth at Section 5.115 is respectfully requested.

A “No” reply has been inserted with respect to the question “Is a directional antenna (other than radar) used?” because the transmitter is a radar device. For the purposes of full disclosure, however, the following additional directionality information is provided:

Maximum width of transmit beam in degrees at the half power point:	Configuration 1: Azimuth = 16.1°, elevation = 16.5° Configuration 2: Azimuth = 8°, elevation = 8°
Orientation in horizontal plane:	Any orientation relative to North
Orientation in vertical plane:	Less than +60 degree boresight elevation

### **3. Interference Mitigation**

Dynetics is well aware of its obligations under Part 5 of the Commission’s rules to avoid interference to co-channel licensees in non-experimental services, and will take all steps to ensure compliance with this obligation. With respect to interference mitigation, Dynetics understands that FAA (or other government stakeholders) may restrict radiation to certain azimuth and/or elevation sectors in order to ensure that the proposed Facilities do not pose a threat of interference to adjacent emitters. Accordingly, this is to confirm that Dynetics stands ready to work with FAA to identify any reasonably necessary restrictions for the system.

Stop Buzzer:

Dynetics advises that the following will be available by wireless telephone and will act as “stop buzzers” if any issues regarding interference arise during testing:

Primary:	Luke Zimmerman – 828.736.5227
Secondary:	Adam Wathen – 256.924.5915

