

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 continue 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.

As a continuation of the operations previously authorized under STA (call sign WQ9XQR), an experimental license is requested to continue to test the Echoguard Model No: 700-0005-203_SSR ground-based surveillance radar in support of Contract# W15QKN-14-9-1001.

Agency:	US Army
Contract No.:	W15QKN-14-9-1001
Government POC:	Will Caraway, CIV USARMY CCDC AVMC (USA) [willie.d.caraway.civ@mail.mil] 256-876-5156 256-655-6424

This radar will not be used for radionavigation operations such as separation of aircraft or air traffic control. Dynetics understands radiolocation operations such as perimeter defense, drone interdiction, and counter-UAS are secondary and shall not interfere with radionavigation operations. Dynetics requests to operate this radar for radiolocation purposes consistent with the waiver granted pursuant to DA 19-556 that allows such secondary operations (i.e. radiolocation).

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

3. Signal Characteristics

The radar uses a linear frequency modulated waveform over an occupied bandwidth of 45MHz. The radar can operate on 3 carrier frequencies within the specified in the action frequency range. The total frequency extent of the radar when operating on the lowest and highest channel is 24.45 GHz to 24.65 GHz, including sidebands.

When operating on the Dynetics campus, the radar will be placed on the ground on a 5 ft tripod with the radar antenna pointed at any azimuth orientation relative to North. In elevation, the radar will be oriented between 0 and 45 deg relative to horizon. There are buildings on the Dynetics campus that will shield the radar from aircraft.

Dynetics will also locate the radar at various locations on Redstone Arsenal within the radius specified. The radar will be placed on the ground on a 5 ft tripod with the radar antenna pointed at any azimuth orientation relative to North. In elevation, the radar will be oriented between 0 and 45 degrees relative to horizon. When operating on Redstone Arsenal, operations will be coordinated with the Government POC and the Redstone Arsenal Frequency Spectrum Coordinator.

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:

Width of beam in degrees at
the half power point:

Azimuth: 2 deg, Elevation: 6 deg

4. 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.

5. 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: Boss Shell, Mobile: (256) 200-6784
Secondary: Jude Collins, Mobile: (256) 694-0063

For the foregoing reasons, Dynetics respectfully submits that approval of this Application is in the public interest, convenience and necessity.