Public Exhibit 1

PUBLIC INTEREST STATEMENT

1. Introduction

By the instant application ("Application"), Dynetics, Inc. ("Dynetics") requests that the Commission grant Special Temporary Authority ("STA") to permit Dynetics to operate the facilities (the "Facilities") specified in the instant application from 05 July 2021 to 5 January 2022.

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.

An experimental STA is requested to test the telemetry system for the Lightweight Precision Munition (LPM) project in support of contract W15QKN-18-9-1008; DOTC-18-01-INIT0417.

Agency:	Army Tactical Aviation and Ground Munitions (TAGM)
Contract No:	W15QKN-18-9-1008; DOTC-18-01-INIT0417
Government POC:	Mr. Julian Olander, julian.c.olander.civ@mail.mil, 256-822-4235

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

The transmitting system is an IRIG-106 Tier 0 PCM/FM telemetry transmitter manufactured by Microwave Innovations, Inc. The model number of the transmitter is 005-12040.

The requested action frequencies are 2250.5MHz (primary) and 2225.5MHz (backup). If these two frequencies are not available, we can adjust the action frequencies within our tunable bandwidth of 2200 – 2395MHz with a 5 MHz channel spacing starting with the first channel at 2205.5MHz.

The modulation is IRIG 106 ARTM Tier 0 – PCM/FM with a data bit rate of 2Mbps encoded as a RNRZ.

Nominal occupied bandwidths are:

3dB BW:	2.1 MHz
20dB BW:	2.35 MHz
40dB BW:	5 MHz

Nominal transmitter output power is 2W mean with an ERP of 6W mean.

The antenna is a conformal antenna mounted on the exterior of the LPM airframe. The azimuth half-power beamwidth is 360 deg, The elevation (roll axis) half-power beamwidth is 160 deg. Orientation will be level to the ground. Overall height above ground will be no more than 2m.

This experimental STA is for limited ground testing on up to five occasions within the 6-month license duration on a temporary-fixed basis in and around the location stated in the application. Testing activities will involve an LPM hanging on or being very near an aircraft on the ground located just outside the property of Northern Colorado Regional Airport (KFNL). The transmitter will be activated for several minutes with the aircraft running its engine on the ground to verify that all aircraft systems operate nominally in the presence of the telemetry emissions.

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. As stated above, if the two requested action frequencies are not available, Dynetics will work with the Commission and/or other stakeholders to identify two frequencies within 2200 – 2395MHz to avoid interference to co-channel licensees in non-experimental services.

With respect to interference mitigation, Dynetics understands that the 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 the FAA to identify any reasonably necessary restrictions for the system. Dynetics will coordinate radio emissions with local authorities prior to test execution if required.

4. Stop Buzzer

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

Primary: 616-460-8389 – Nate Forton
Secondary: 256-509-5513 – Tyler Cordell

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