

From: Enerdyne
To: FCC Office of Engineering and Technology
Subject: Experimental License
Date: 05-14-09

1. Purpose

This memo describes the type of testing Enerdyne would like to conduct.

2. About Enerdyne

Enerdyne is one of the leading suppliers of video and data multiplexers along with radio links geared toward unmanned aerial vehicle (UAV). We have both commercial and military customers.

3. Experimental Request

Enerdyne is developing an auto tracking antenna to be used with our airborne equipment. We would like to test the tracking algorithms in a real life environment.

Enerdyne would like to attach its airborne equipment to a helicopter and fly in different patterns to test the auto tracking antenna. This is a 2 way system meaning the auto tracking antenna will be transmitting as well as receiving. All of the transmitting equipment can be limited to be under 5 watts.

The helicopter would fly up to 16km from the fixed location of the antenna station. It would need to fly a $\frac{1}{4}$ (90deg) of a circular pattern NE from the fixed antenna station. After checking the nearby area (proximity to Enerdyne) we came up with the following location to be well suited for our application. 32.70556N 115.97667W

It is in a remote area of Imperial County with a great sloping terrain and good visibility.

Enerdyne currently offers 4 different frequency bands for its equipment. The bands are; L-band (1700-1850), S-band (2200-2500), lower C-band (4400-4950) and upper C-band (5250-5850). For testing most combination of these bands can be used. We are open to use any of the bands at any frequencies. For example the airborne can transmit at any frequency in upper C-band and the ground station can transmit at any frequency at lower C-band. We can't mix C with L/S bands.

Thanks for considering our request and we look forward to future discussions.