

Response to STA Form – Purpose of Operation

Altaeros Energies, Inc. (“Altaeros”) testing involves placing a fixed, tethered aerostat at an altitude of 150 meters AGL and transmitting with six (6) Ericsson LTE radios. See Attachment 3, radio specifications. The Federal Aviation Administration (FAA) has approved the Altaeros moored aerostat operation at the Altaeros Research and Development facility in Fremont, New Hampshire through August 31, 2019. See Attached 5, Certificate of Waiver or Authorization dated July 23, 2018. The waiver, under FAA regulation 14 C.F.R. Part 101.1 Subpart B, permits the aerostat to operate at 700 feet above the earth’s surface (213m AGL) at the facility. Operations are approved for day and night. Consent for the use 2572–2578 MHz spectrum has been obtained from the spectrum licensee. Altaeros conducted a 60km radius RF spectrum survey around the Fremont, New Hampshire transmitter location for the authorized spectrum and for adjacent spectrum and no spectrum use was observed. The test will be configured to prevent any uncontrolled transmission. A “stop button” for the transmitter will always be available in the event of an interference issue. During all transmission testing full control of the transmitter will be maintained by Altaeros personnel on the ground. The LTE base station will transmit to LTE handsets. Altaeros will gather information from the test transmissions at various heights at or below the authorized height and in various environments and locations around the transmitter.

A diagram of the Altaeros tethered aerostat system is below.

