## Exhibit: Question 5, FAA Antenna Sketch

Three transmitters will be utilized as part of a federal research contract; one mounted on a high altitude balloon and two mounted on Mobile Ground Stations (MGS). The launch point of the balloon/payload is Baltic, SD. The anticipated potential overflight area (subject to stratospheric wind conditions) is between 39 N to 46 N latitude and 105 W to 92 W longitude. The altitude of the transceiver on board the balloon will be between 50,000 to 68,000 feet with a target altitude of around 65,000 ft. Above Mean Sea Level (AMSL). Maximum duration of the flight (payload/MGS transmitters active) is 12 hours. Minimum duration of the flight is 2 hours. Only one flight will occur in a launch window as specified in the Start/Stop dates of this application filing.

The antenna will be fixed to a high altitude balloon operating at 68,000ft (max) during the float phase, above commercial aviation cruising altitudes. During payload ascent/descent an ADS-B transponder will be active notifying aircraft in the vicinity of the balloon/payload position. The payload radio will be active during ascent, float, and descent phases of the flight. The MGS antennas will be at terrestrial altitudes (mounted in vehicles), and will be pointed towards the payload during the flight.


