

March 26, 2014

**Subject:** Project description: ADS-B

Appareo is designing an implementation of the FAA's next gen air-traffic-control (ATC) protocol: ADS-B. The radio broadcasts aircraft state information to ground stations and any other aircraft equipped with an ADS-B capable receiver. This provides increased situational awareness for pilots and ground crews.

**Background:**

Federal Aviation Administration has a 2020 mandate (14 CFR Part 91 paragraph 225) for aircraft operating.

Currently, Appareo Systems has a contract with the University of North Dakota to develop, certify, and install ADS-B transponders for use in general aviation pilots across North Dakota.

**Project Objectives:**

Create a transponder compliant with FAA TSO-C112d, TSO-C145c, and TSO-C166b. This transponder with receive interrogations on 1030 MHz and reply on 1090MHz.

Very Respectfully,