

### **Exhibit: Description of Experiment and Antenna Sketches**

Rockwell Collins, Inc. (Rockwell Collins) respectfully requests a new experimental license to communicate command and control messages to unmanned aerial vehicles (“UAVs”) flying below 400 feet for beyond visual line of sight (“BVLOS”) research flights.. Rockwell hopes to start this testing by mid-June.

#### **Explanation of Experiment**

Rockwell Collins will fly unmanned aircraft systems (“UASs”) utilizing Rockwell Collins’s experimental radios designed for the purpose of UAS command and control (“C2”). Specifically, Rockwell Collins will be using these radios to test UAS C2 for BVLOS flights. The testing will involve using the same radio on the aircraft and ground station. The radio itself is a small form factor radio with ruggedized enclosed size for UASs with a gross takeoff weight of less than 55 lbs.

The objective of this testing is to demonstrate that these radios can operate to command and control a UAS in the defined operating area. Successful demonstrations are necessary to determine the viability of the Rockwell Collins-designed radio for UAS C2.

#### **Antenna Descriptions and Sketches**

Rockwell Collins will place the antennas in five different locations—two in Illinois, and three in Iowa. Three of the antennas will be mounted using cells on wheels (“COWs”); one will be mounted on a building roof; and the final will be mounted on an existing tower.

##### *Cells on Wheels*

For the three mobile locations (the two Illinois locations, as well as the Iowa Rockwell Collins aircraft airport location), the antennas will be mounted using COWs, as depicted here:



- The southern Illinois COW, which will be located at NL 38-56-50, WL 88-16-40, will be 110 feet tall, or 33.5 meters, from the ground to the tip of the antenna.
- The northern Illinois COW, which will be located 5 nm north of NL 38-56-50, WL 88-16-40, will be 60 feet tall, or 18.3 meters, from the ground to the tip of the antenna.. The exact location of the northern tower is subject to change, within the defined parameters, pending landowner setup permissions and in order to optimize mission lengths.
- The Rockwell Collins aircraft airport COW, which will be located at NL 41-39-02, WL 91-37-37 (in Iowa) will be 25 feet tall, or 7.6 meters, from the ground to the tip of the antenna.

*Coralville factory roof*

For the Coralville, Iowa, base and mobile location, the antenna will be placed on the roof of the Coralville factory, as depicted:



For this location, the building is 26 feet tall, the antenna structure is 18 feet, and the antenna itself will be 6 feet. In other words, the antenna will only extend 24 feet, or 7.3 meters, above the building. The height from the ground to the tip of the antenna will be 50 feet, or 15.2 meters.

*Rockwell Collins Antenna Tower*

For the Cedar Rapids, Iowa, base and mobile location, the antenna will be mounted on the existing Rockwell Collins Antenna Tower, as depicted:



The antenna will be mounted at 250 feet, or 76.2 meters, on the Rockwell Collins tower.