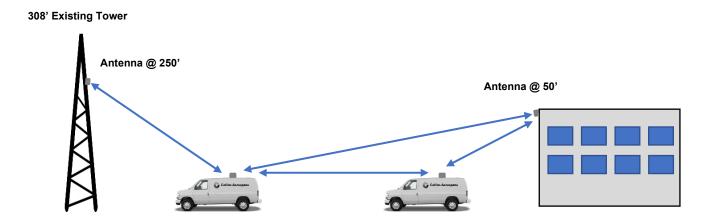
EXHIBIT 1 DESCRIPTION OF EXPERIMENT

Rockwell Collins, Inc. ("Collins"), a Raytheon Technologies company, is proposing to perform independent research and development ("IRAD") testing of a communications system using U.S. Department of Defense ("DoD") tactical waveforms. This application is similar to special temporary authority call sign WT9XZH, but is for a longer-term period of experimentation and involves additional channels. A 5-year license is requested since Collins will test multiple channels in various configurations and weather conditions over a long period of time.

The testing will involve 1 fixed antenna on a Collins communications tower, 1 fixed antenna on a Collins building, and antennas mounted on 2 ground vehicles. There will be two-way communications between the fixed stations and the ground vehicles, as well as between the ground vehicles.



Four spectrum bands will be utilized, each of which is broken into 13 MHz channels:

1350 – 1390 MHz (3 channels)

1755 – 1850 MHz (7 channels)

2025 – 2110 MHz (6 channels)

Channel usage will depend on testing requirements and coordination conditions from licenses with allocated status.

The stop buzzer is:

Jeremy Zumbach

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Station Class	Coordinates	Description
Fixed	42 00 44, -91 38 50	Building-mounted antenna mounted @ 50' AGL 855 35 th St. NE, Cedar Rapids, Iowa
Fixed	42 02 01, -91 38 56	Tower-mounted antenna mounted @ 250' AGL on 308' AGL communications tower (FCC ASR 1063558)
Mobile	42 12 5, -91 36 43	Two ground vehicles operating within 80 km radius of centerpoint

ANTENNA ON COMMUNICATIONS TOWER

One of the fixed antennas will be installed at approximately 250' AGL on an existing 308' AGL communications tower (FCC ASR 1063558).

