## 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:
$1350-1390 \mathrm{MHz}$ (3 channels)
$1755-1850 \mathrm{MHz}$ (7 channels)
$2025-2110 \mathrm{MHz}$ (6 channels)
Channel usage will depend on testing requirements and coordination conditions from licenses with allocated status.

The stop buzzer is:
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| Station Class | Coordinates | Description |
| :---: | :---: | :--- |
| Fixed | $420044,-913850$ | Building-mounted antenna mounted @ 50' AGL <br> $85535^{\text {th }}$ St. NE, Cedar Rapids, lowa |
| Fixed | $420201,-913856$ | Tower-mounted antenna mounted @ 250' AGL <br> on 308' AGL communications tower (FCC ASR 1063558) |
| Mobile | $42125,-913643$ | Two ground vehicles operating within 80 km radius of <br> 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).


