

## DESCRIPTION OF EXPERIMENT

A new radio capability is being tested as part of ongoing exercise with the Department of Defense. The radio under test will be installed on airborne (group 3 UAS), ship, and ground sites to test its ability to move different types of data, operate on the move, and evaluate performance with the ranges and platform types identified. This radio capability is meant to work in a tactical environment without the need for base stations or other persistent assets.

## ADDITIONAL INFORMATION

Flight Elevation: 10,000 ft

Stop Buzzer: Sasha Oster 515-401-8537

## ANTENNA

On the omni vs directional portion, we have a directional antenna; however, it can be turned to any orientation.

Platform using a directional antenna: We just place the directional antenna on a tripod for testing. The antenna model: Manufacturer: Collins/UCSD, Model No: 256

Width of Beam at Half Power Point: 8 degrees

Orientation in horizontal plane (degrees from True North): We may rotate this during the experiment.

We intent to point our RF beam only directly at other radios (minimize scattering). Geometries encourage pointing at or below the horizon.

UAS is aware of NOTAMS, warning region(s) W-291E based on current sectionals.

