## **DESCRIPTION OF EXPERIMENT**

Rockwell Collins, Inc., a part of Collins Aerospace ("Collins") is developing radio technology for communications between aircraft and ground stations and needs to conduct experiments for both independent research and development work ("IRAD") and Demos for U.S. government sponsor. Collins will perform various ground-to-ground and air-to-ground experiments in support of these efforts.

## ADDITIONAL INFORMATION

Flight Elevation: 15,000 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.

The nominal point directions are: San Diego-Pt. Loma: Due West (270 degrees) to Due North (0 degrees) Oceanside-Camp Pendleton: Will need to cover the full 360 (0 to 359 degrees) Aircraft: Will need to cover the full 360 (0 to 359 degrees). If Mexico is a problem, we construct it, so we never point Due South. Boat: Due East 29 Palms: Due West





Orientation in vertical plane (degrees from horizontal). All antennas point at the horizon.