Xwing Research Project

As Xwing continues its development of unmanned aircraft technology the flight test program requires and an expansion to its footprint to support new operations - which include beyond visual line of sight scenarios and multiple aircraft. As part of flight tests both high bandwidth air-to-ground c2/telemetry/video as well as ground-to-air c2/telemetry LOS radios are used. As such xwing needs to modify current ground basestations and deploy additional ground basestations to include mobile versions which accompany mobile control centers. Our main control center remains at KCCR but mobile/fixed control centers may be setup up at a variety of airports or communication hubs in our operation region. Ground and aircraft equipment are outlined below. Ground equipment has several configurations used based on conop and each configuration may be used at any location in order to provide continuous coverage and safety of flight.

Ground Equipment KCCR:

- Silvus Technologies SC4200/SC4400
- Desired Frequency: 2200-2500MHz / 1425-1492MHz
- Location
    - Ground Address: 101 John Glenn Dr, Concord, Contra Costa, CA
    - Latitude: 37-58-59.6 N Longitude: 122-03-23.3 W
- Power 20W
- Frequency Stability 0.002 %

Ground Equipment Mobile/Temporary:

- Silvus Technologies SC4200/SC4400
- Desired Frequency: 2200-2500MHz / 1425-1492MHz
- Location
    - Ground Address: Within 322km radius of KCCR
    - KCCR Latitude: 37-58-59.6 N Longitude: 122-03-23.3 W
- Power 20W
- Frequency Stability 0.002 %