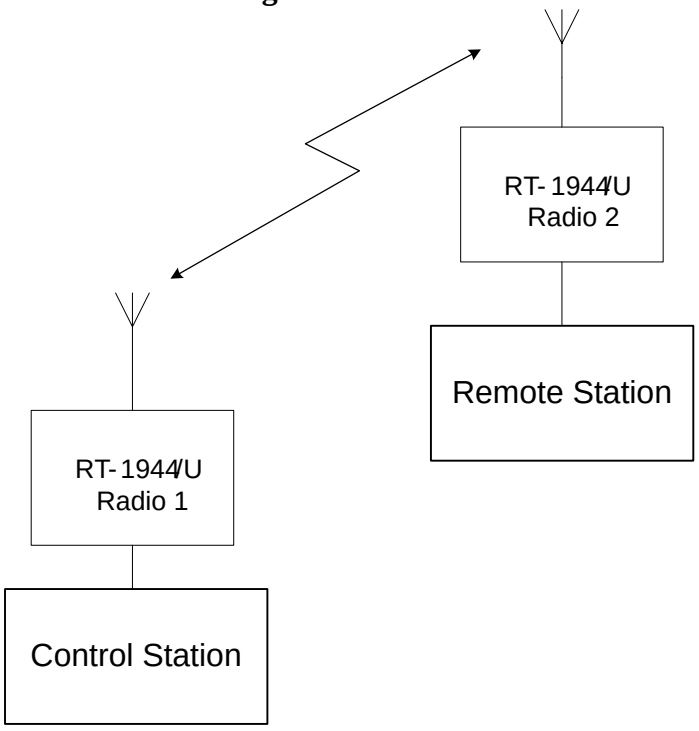
Antenna Information

Lockheed Martin requests experimentation using a two-way mobile radio data links. Such research is intended to improve Navy sensor and status communication using the following three antennas described on two radio sets that create multiple radio links. Radio Set #1 may use various antennas listed for experimentation such as comparing radio link performance per antenna used. Mobile radio link stations are intended for performance testing using any combination of antenna listed per radio link.

Radio Set Antenna Diagram:



Radio #1

Transmitter:

- Manufacturer: Reliable System Services Corporation
- Model: RT-1944/U SeaLancet, Multi-Band Network Radio (MBNR)
- Transmit Power: 10 W (with RF amplifier used)

Antenna:

- Manufacturer: Nearson
- Model: 800 directional patch antenna, or similar
- Polarization: Vertical
- Gain: 18 dBi
- Beamwidth: 40° Azimuth x 16° Elevation

Alternate Antenna:

- Manufacturer: Phazar Antenna Corporation
- Model: BRSNF90-2000-16-T0-N, Panel Antenna

Polarization: Vertical
Gain: 16.7 dBi
Beamwidth: 90° Azimuth x 6.3° Elevation

Radio #2

Transmitter:

Manufacturer: Reliable System Services Corporation
Model: RT-1944/U SeaLancet, Multi-Band Network Radio (MBNR)
Transmit Power: 10 W (with RF amplifier used)

Antenna:

Manufacturer: Antenna Products Corporation
Model: RMV-101
Polarization: Vertical
Gain: 5.5 dBi
Beamwidth: 360° Azimuth
+/- 8° Elevation