Yagi Antenna Setup E&P

# Antenna Network Overview

[Network image]

# Antenna Orientation

The yagi antennas must be mounted on either tripod in a horizontal orientation as shown below in order to ensure proper connectivity.

[Horizontally mounted antenna image]

***Note: An incorrectly mounted antenna***

[Incorrect vertically mounted antenna image]

# Coax connections

The yagi antennas have an RP-SMA Male Coax connector as shown below that needs to plug into the appropriate RP-SMA Female Coax connector on its Xbee pair.

[RP-SMA Male & Female Connection image with coin for scale]

After coax connection is made visually inspect the solder joints to the folded dipole in order to ensure electrical continuity as shown below.

[Proper solder joints image]

This process will be repeated twice once at the ground station and again at the launch box.

***If either solder joint has become undone the joint will have to be re-soldered before antenna becomes functional***

# Test Antenna connectivity

After setup is complete a test signal will need to be sent from the laptop at the ground station in order to ensure the launch box antenna is receiving and responding.

[Screenshot image of Xbee Test Signal window]

Once the signal test is completed the antennas are now ready for launch.

***If the test signal is not being received refer back to step 3***