Communication Proposal

Team name:Endurance

Affiliation:

Submission date:

Version:1.0

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| ID | Short Name | Description | Test Methodology | Assumptions  /Compliance |
| End\_rover\_comm\_20 | Antenna | Antenna is the main element of communication.  It helps in transmitting and receiving signals to communicate and control the robot.  The structure of Communication through Antenna will be:   * We use two Antennas, one at our base another on the rover. * The one we are using at the base is directional, the one we are using on the rover is omnidirectional. * The reason we are doing this is as we have control over the Antenna at base, but not at rover we need Rover to receive signals from all the sides * All the control signals are being sent at a frequency of 2.5GHz bandwidth to reduce interference of noise. But video broadcasting needs huge bandwidth hence we are using 5GHz | Testing of the established antenna can be done with the help of SDR kit.  Setting of the parameters can also be done with simulation tools accordingly. | We believe the rover will be able to communicate to the base station with full efficiency. We want to make sure that the signals are received immediately with minimum delay and also with least possible disturbance. |