Project Phase Descriptions

Phase 1:

Phase Objective(s):

Vehicle:

Design and Build Vehicle

RCU:

Design, Build and Program for S/W ver 1.0 functionality

Test-Stand:

Design and Build Test Stand

GCS:

Design and Build GCS

GCS Interface:

Program for S/W ver 1.0 functionality

Ancillary Objective(s):

Create Initial System and Subsystem Documentation.
Design and Deploy Communications Network.
Implement development environment for Primary Controller.
Implement Program Wiki Page.

Engineering Challenges:

Design and Implement the RF Communications system to be able to handle the required data rate with a reliable Quality of Service (QoS) at sufficient distances.

Phase 2:

Phase Objective(s):

Vehicle:

Program for S/W ver 1.0 functionality

RCU:

Program for S/W ver 2.0 functionality

GCS:

Program for S/W ver 2.0 functionality

Test Stand:

Build Test Fixture Assembly and electronics

Engineering Challenges:

Design and Implement Discrete PID Control on Secondary Controller.

Phase 3:

Phase Objective:

Vehicle:

Program for S/W ver 2.0 functionality

Engineering Challenge: Design an advanced Control System on Vehicle to increase Vehicle stability and responsiveness.

Phase 4:

Phase Objective:

Vehicle:

Program for S/W ver 3.0 functionality

Phase 5:

Phase Objective:

Vehicle:

Program for S/W ver 4.0 functionality