

*Control Station:* The Vigilante Ground Control Station (GCS) consists of a dedicated Computer running a Linux based Ground Control Software showing aircraft and system status, mission status, and aircraft orientation. The Control station is battery backed incase of loss of power. It handles all communications with the Vigilante UAV on the ground side, except for the FTS link. The control station contains a Joystick Console, where manual control of the Vigilante occurs. Through this station, the UAV operator inputs various commands, vectoring the aircraft to desired headings, airspeeds, and altitudes. Vigilante's FCC determines the safest way to achieve those commands. Otherwise, the Operator does not fly the UAV, but rather, tells the UAV what he wants the aircraft to accomplish, and the computer system does it's best to accomplish that task. The GCS also contains an independent Flight Termination System (FTS). This system is ground activated whenever required as specified in the Emergency Procedures. It is an independent system with battery backup that is digitally linked to the airborne FTS unit. Both the GCS and the FTS are located within a 1.5km operational area, all within visual site of the UAV in operations.