

## 1.5 Ground Control Station (GCS)

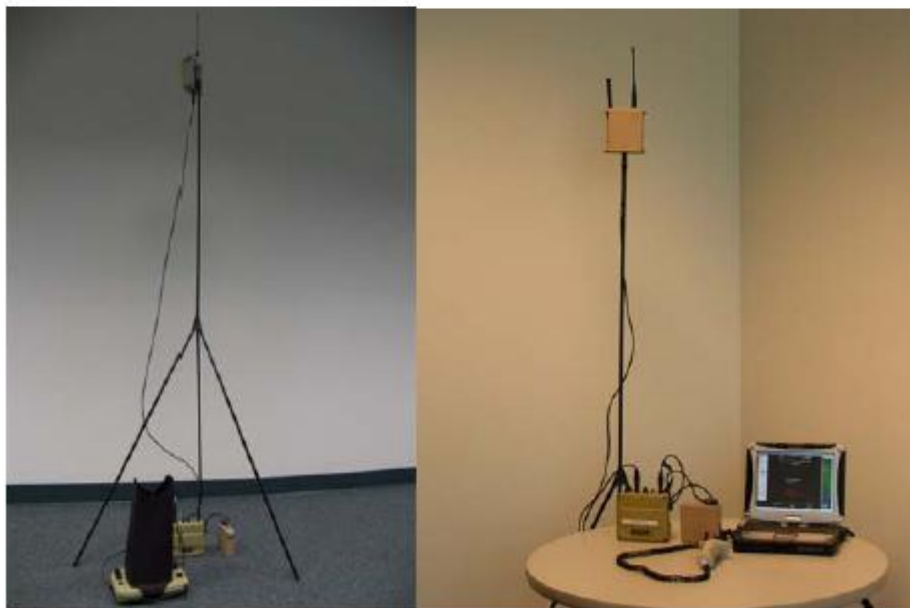
The Wasp Air Vehicle is controlled by the GCS. The system can be set up and operated using several configurations:

- Laptop with Joystick
- Single Hand Controller
- One Hand Controller with Laptop

### CAUTION

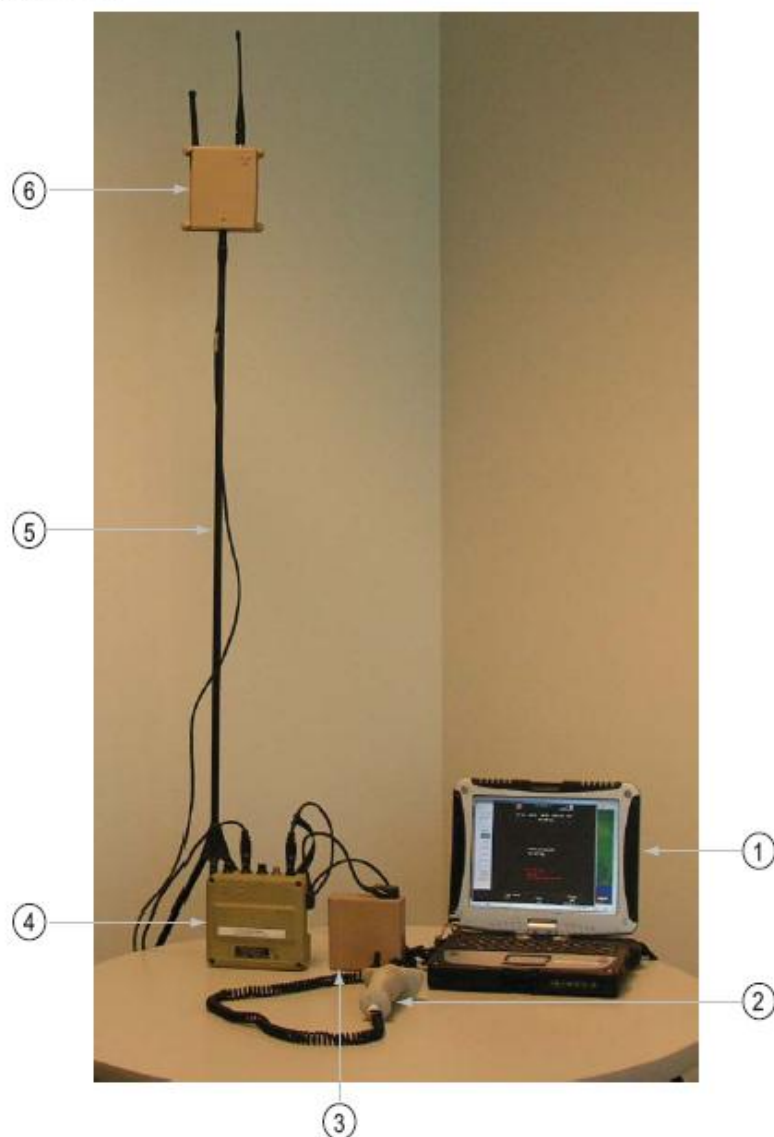
Continuously monitor GCS battery voltage to ensure adequate power remains. Failure to maintain adequate battery voltage will result in Loss of Link (LOL).

The GCS package, containing a single Hand Controller, weighs approx. 8.1 lb. The GCS is equipped with two battery connectors to allow continuous operation, even while switching batteries (see Section ). The GCS will operate for approx. 1.5 - 2.0 hours on a single BB-2557 battery (beyond 3 hours per charge if not using the Hand Controller). The GCS can also be used with the common BA-5590, BB-390B/U, and BB-2590/U batteries.



**Figure 1-2 GCS Assembled, Two Configurations**

The GCS is composed of the pieces shown in Figure 2-13 and listed in Table 2-1.



**Figure 2-13 GCS Components and Assembly**

**Table 2-1 GCS Components**

| No. | Item                                                     |
|-----|----------------------------------------------------------|
| 1   | Laptop                                                   |
| 2   | Joystick                                                 |
| 3   | GCS Battery                                              |
| 4   | Hub Unit                                                 |
| 5   | GCS Mast and Antenna                                     |
| 6   | Radio Frequency (RF) Unit with Transmit and Omni Antenna |
| --  | Ethernet and RF Cables                                   |

## 1.6 Laptop Computer

The Wasp Air Vehicle can be operated using a laptop computer. The VO uses the laptop to monitor mission progress and to program navigation waypoints. The laptop weighs 4 lb. with battery. A joystick (Figure 1-3) can be used with the laptop to perform Hand Controller functions (see Section 3.4).

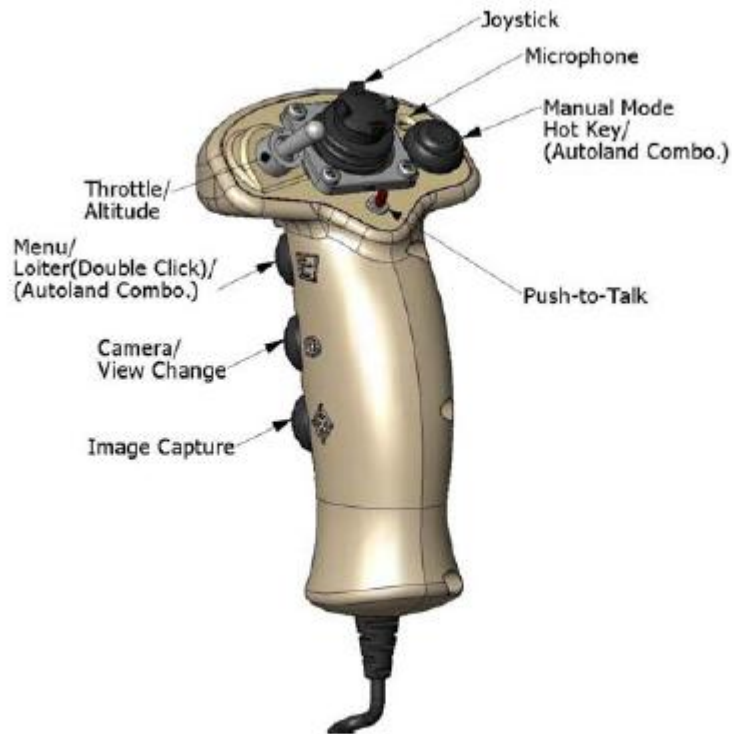


Figure 1-3 Joystick