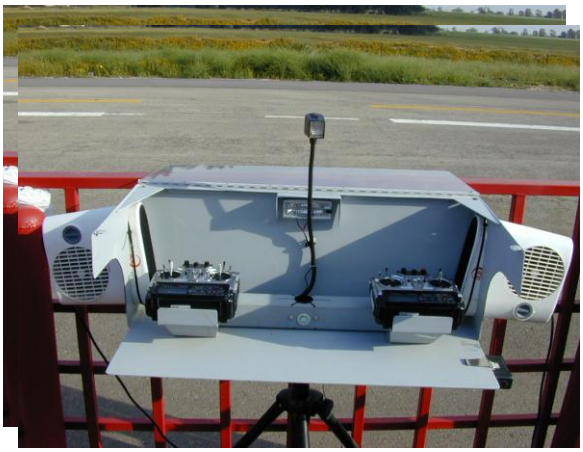
Aircraft System
CONTROL STATION



The Aerostar UA is launched and recovered using an External Pilot (EP) located adjacent to the runway in coordination with an Internal Pilot (IP) located in the Ground Control Station (CGS) or Launch and Recover System (LRS). The EP control station includes flight control boxes used by the EP to visually control the Aerostar UA and an internal communication system (ICS) for direct communication with the IP during operations. The EP control station is physically connected to the GCS or LRS.

The GCS has full pre-flight and in-flight mission planning functions, including real-time control of the UAV, based on a real time control (RTC) identical to that in the Aerostar UA's UMAS. The GCS contains Internal Pilot and Payload Operator (PO) positions side-by-side. The PO position provides backup components of the IP position. The GCS includes power supplies, backup power supplies, internal communications system, video recording system, air-band VHF radio, and military and air-band UHF/VHF radio. The GCS communicates with the Aerostar UA using a Ground Data Terminal (GDT) C-Band and UHF antennas. The GDT enables both (primary) directional and omni (secondary) transmissions to the Aerostar UA. The UHF antenna enables backup transmissions to the Aerostar UA.

The LRS is a portable version of the GCS with a single position incorporating both IP and PO functions. It is primarily used when the GCS is not physically located at the launch and recovery site. This allows distributed operations where the Aerostar UA can be launched and then passed forward to the MCS located in the mission area for greater operating distances.

The Remote Payload Control Station (RPCS) provides control of the payload system and display from a location other than the GCS or LRS.