

Ground Control System

CAe is well known for its expertise in Control Systems for UAS's and particularly for its developments in autonomy aimed at deskilling the flight operations. In support of this, the CAe portable **Ground Control System (GCS)** that has been developed to be compatible with existing CAe air vehicle flight control systems, but with capabilities for extension to other third party systems.

The CAe GCS is a touch screen based unit that is simple to operate, yet powerful in function. The operator supplies departure, flight and recovery plans via the touch screen, both prior to the start of a mission with the ability to update whilst the mission is in progress. During a mission the operator can select and initiate a variety of algorithms that enable the operator to view points of interest automatically. The screen displays both video imagery from the vehicle, plus map and telemetry data.

The unit is housed in a rugged case that can be used in, or remote from, a ground vehicle. Power can be supplied either from the vehicle or from internal batteries. The transmission and receiving systems can be remotely sited if required.



Key features of the GCS

- Compact and man portable.
- Can be vehicle mounted or used stand-alone.
- Powered by either 12V vehicle supply or 110/230V (ac) mains adaptor.
- Internal battery allows continuation of mission should the external supply fail.
- Communicates with compatible flight control systems.
- Only two radio links required: Command and Video.
- System utilises CAe Telemetry In Video system (TIV) to reduce the number of radio links from the air vehicle.
- 'User friendly' touch screen interface for: Mission planning, including the configuration of flight boundaries plus departure, main mission and recovery routing.
- Performance of pre-flight checks and launch sequence.
- Control of the air vehicle during the mission, including in-flight changes to mission planning.
- Intuitive touch screen pointing to assign points of interest to guide the air vehicle.
- Display of map, telemetry and air vehicle video on a single screen, windowing user interface (or optionally via additional screens).
- Facility to add a pilot control unit should operational needs require this.
- Full data and video recording capabilities.
- Linux operating system.

For more information, please contact:

Gordon Dickman, Cranfield Aerospace Limited
Cranfield, Bedford, MK43 0AL, United Kingdom
Tel: +44 (0) 1234 754254 | Fax: +44 (0) 1234 752375
Email: g.dickman@cranfieldaerospace.com

www.cranfieldaerospace.com



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