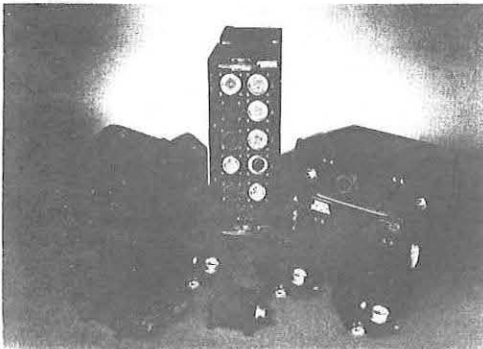


### Target Control Systems



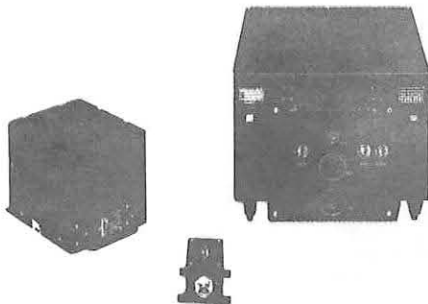
GEC Avionics has more than thirty years experience in the field of control equipment for target aircraft.

Flight Controls Division has designed and developed equipment for small towed targets like Rushton, specially designed subscale targets such as Jindivik and Falconet, full scale drone conversions for Canberra, Meteor and Sea Vixen and most recently a general purpose Digital Advanced Ground Station.



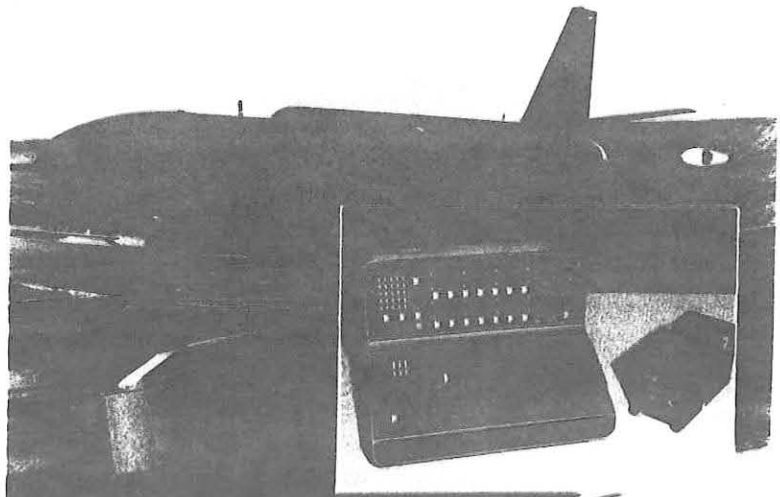
Rushton towed target is a sea skimming device used as a minimum-cost training missile, enabling realistic simulation of a potential threat. The flight computer provides accurate height keeping control in conjunction with a radio altimeter at speeds of 300 knots.

Jindivik is a general purpose subscale target for both air-to-air and air-to-ground missiles remotely controlled over the entire flight envelope including take off and landing. Inner loop control provides stabilisation in the pitch and roll axes while the outer loop autopilot control is effected from the ground using radio commands. In addition to the barometric height mode, a radio altimeter gives good low level height control. Rapid roll manoeuvre demands and evade capabilities are also provided.

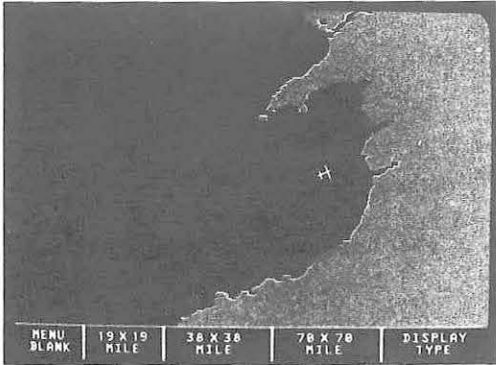


Full scale drone conversions were simplified by the development of the Universal Drone Pack (UDP) which enables the aircraft to revert to the manned role. The UDP, comprising a control computer, 3-axis rate gyro and accelerometer packages is mounted on the ejector seat rails and is currently in use with the Sea Vixen. Control is effected from the ground by radio commands.

Falconet is a specially designed advanced subsonic aerial target for use with close air defence missile systems and is manufactured by Flight Refuelling Ltd of Wimborne, Dorset. Designed for minimum target cost, it is launched from a carousel and much of the outer loop control is effected in the ground based control unit. This Command/Control Unit (CCU) contains a microprocessor based interface between the operator and the target which encodes the control functions for transmission over a data link.



# Target Control Systems

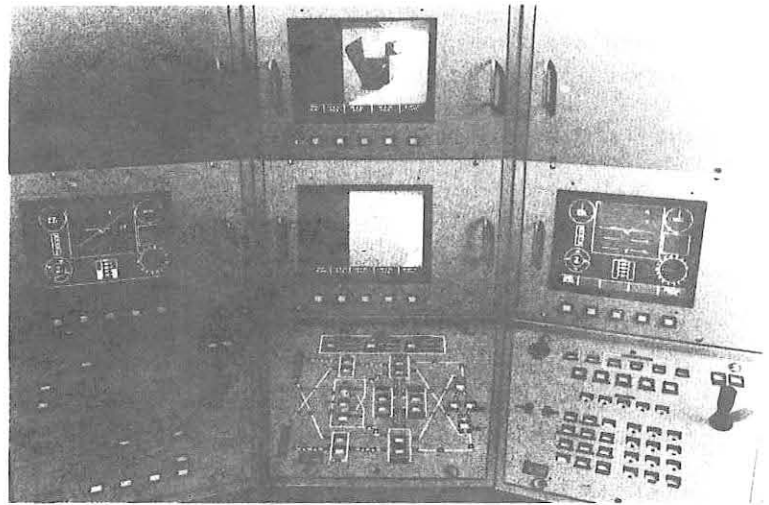
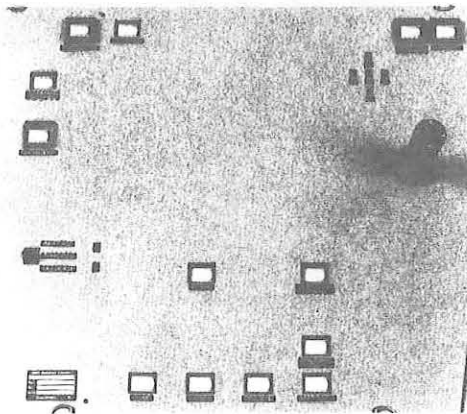
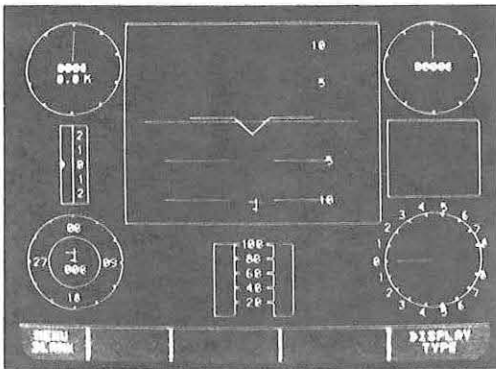


The Advanced Ground Station embodies the latest display technology and is aimed at improving the man/machine interface for the control of target aircraft. Four high resolution colour monitors are driven by custom designed generators offering real time TV overlay capability. Display formats on each monitor are soft key selectable.

The system is software programmable to suit a number of different target aircraft, a different control panel being fitted to match the aircraft variant with the necessary inbuilt safety features to prevent inadvertent operation.

A high level of operational safety and availability is assured by the use of duplicated control paths. In the event of failure, a configuration panel allows the operator to make optimum use of the remaining facilities.

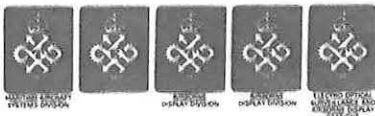
The ground station experience coupled with that of airborne systems manufacturing and the Company's expertise in sensors, offers a total systems capability for target developments.



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