

Aircraft System

COMMUNICATION

The Adaptive Flight Hornet Maxi has three elements of the communications system. The Ground Command Station (GCS), which is used by the pilot to monitor, direct, and control the UA; and the Payload Control Station (PCS), which provides the communications to the TASE 200 Gimbal. Both the GCS and the PCS connect to a Wave Relay modem. This system transmits to the UAS on a (b) (2), Digital Spread Spectrum (DSS) link. The transmitter for the GCS and Hornet use 1 Watt of power and are limited to 3-4 nm ranges, although the link is capable of more than 6 miles with a directional antenna. This provides a good buffer for the link to ensure link connectivity. The link has the ability to be encrypted, which negates the inadvertent control theft and reduces the potential for hostile control take-over.

Communications Diagram

