

Aircraft System

- Description of aircraft system.



Figure 1: Vision UAV

The Vision UAV is a small, unmanned aerial vehicle that is currently operated as a radio controlled aircraft and contains a stability augmentation system (SAS) for flight control (Figure 1). The Vision UAV carries an electronics payload that operates independently of the aircraft systems. The Vision UAV has a gross weight of 30 lbs and a rotor diameter of 6 ft. It operates at speeds ranging from hover to 45 kts. The battery power supply is currently limited to 12 minute flight duration maximum.

The aircraft is constructed of composite materials (carbon fiber) and machined metal parts. Prototypes have been flight tested over a 5 year period.