Aerosonde Visual Surveillance Summary:

Airborne based (Chase Aircraft)
The NASA-8 Beechcraft King Air has been used to maintained visual contact with the Aerosonde during previous flight operations. A UAV observer is stationed inside the aircraft and is equipped to communicate with the UAS pilot.

NASA 8 Description

Beechcraft Model 200 Super King Air. Powered by two 850 SHP (Shaft Horse Power) Pratt & Whitney turboprop engines

NASA 8 Specifications

Altitude - 35,000 Feet

Payload - 1,000 Pounds

Airspeed - Cruises at 260 Kts

Wingspan - 54 Feet 6 Inches

Length - 43 Feet 9 Inches

Height - 15 Feet

Range - Up to 2,272 Miles

Ground based
All flight operations with the Aerosonde UAS are conducted using an external pilot. The role of the external pilot is to perform takeoff and landings, and insure the safe operation of the vehicle while within visual range. The external pilot is also responsible for detecting and avoiding other aircraft and insuring that the UAV remains within the approved operational area. All UAV operators are required to hold a class 2 FAA medical certificate and be certified in their respective crew positions.

Visual observation from one or more ground sites
All flight operations at the Wallops Flight Facility are required to also have an Operational Safety Supervisor (OSS). One OSS is stationed with the flight crew and insures safe flight operations and that proper procedures are followed. If flight operations are required beyond the visual range of the external pilot and not yet in the restricted airspace, and additional OSS shall be used to act as a visual observer. All OSS personnel associated with the flight operations have radio communications with the control tower and the flight crew. All visual observers are required to hold a valid drivers license and be certified in their respective crew positions. All UAV observers are required to hold a class 2 FAA medical certificate.