



July 20, 2010

RE: Airworthiness Statement for AeroScout B1-100 Helicopter used by the Virginia Tech Unmanned Systems Laboratory at Virginia Polytechnic Institute and State University

The purpose of this memo is to document the certification process used to certify the airworthiness of the AeroScout B1-100 Helicopter outlined in this COA application. The B1-100 is used solely for research purposes and is operated in uninhabited areas at Virginia Tech's Kentland Farm.

The B1-100 is a factory-built unmanned aircraft, assembled to very high standards in Switzerland. There are an estimated 10 B1-100 aircraft of this design currently flying in Europe and Asia, there are none currently in the USA. The company maintains parts and technical support for the US operators through Viking Aerospace in Lawrence, Kansas. This office maintains contact with all US end users and provides notices in reference to operational issues as they may arise. The contact at the company is Lance Holly.

Prior to first flight, all servos, linkages, belts, pulleys and engine components are carefully inspected using the inspection procedures recommended by Viking Aero. The inspectors at this initial stage are an RC pilot with several years of experience and a commercially-rated pilot with 1,700 hours of flight time in a variety of aircraft.

Prior to all flights, the B1-100 will be carefully inspected for airworthiness using the checklist included in the Airworthiness_Statement_AeroScout document (included in the COA application). Two preflight inspections are performed by two different individuals prior to flight. The first preflight occurs at the lab before the helicopter is transported to Kentland Farm. The second preflight occurs just prior to flight, and is conducted by the pilot. The mission coordinator collects the preflight forms and checks the preflight off of the Mission Coordinator Checklist. Flight logs are kept by the mission coordinator to summarize the flight, lessons learned and any corrective actions determined to be necessary for the next flight.

Virginia Tech maintains contact with other US B1-100 users, in the event that they have experienced operational issues that would be critical to the safe operation of Virginia Tech's B1-100. Likewise, Virginia Tech is committed to sharing safety of flight issues with other B1-100 operators, to maintain an overall safe operation of the fleet.

Sincerely,

Kevin Kochersberger, Ph.D.