



United States Department of Agriculture  
Research, Education, and Economics  
Agricultural Research Service  
South Atlantic Area

## AIRWORTHINESS STATEMENT

This vehicle system is based on a popular hobby-type model airplane (*Sig LT-40*) with a 25 inch wing extension (to 95 inches from 70 inches) to reduce the wing loading and lower operating speeds. This wing was load tested to +5 G's to verify structural integrity. Electric propulsion (*Hacker 40L*) has been substituted for the internal combustion motor typically used for a model such as this, to improve reliability and safety. Flight characteristics of this vehicle are typical of a radio-control training model, which offer positive stability and control in all axes. SIG manufactures 1000's of model aircraft and each model undergoes hundreds of hours of testing to assure structural stability during flight, responsiveness to controls and the ability to withstand rough landings.

Based on section 2 of the Department of Defense MIL-HDBK-516B this aircraft qualifies as a Remotely Operated Aircraft (ROA)/Unmanned Aerial Vehicle (UAV). Our certification process adheres to the sections of MIL-HDBK-516B that are applicable to ROAs/UAVs.

This particular system has accumulated approximately 3 hours of flight time with no significant anomalies. All procedures for verifying system stability pre- and post-flight have been documented and provided in the proceeding attachments. We believe that these checks meet the requirements of airworthiness and agree to take responsibility for the system, the safety of its operators, and operate under the restrictions contained in the COA application.

A handwritten signature in black ink, reading "Timothy C. Strickland". The signature is fluid and cursive, with the first name "Timothy" and last name "Strickland" clearly legible.

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