

# RECORD OF ENVIRONMENTAL CONSIDERATION

## 1. Description and location of proposed action:

This project is broken down into two sub-projects. The first project involves the design and fabrication, testing and development of a sensor to be placed on composite wing body planes to detect electric impedance and damage diagnosis of the composite material which may occur from lightning strikes. The second project involves developing data acquisition system to be added to the Embedded Avionics Research Lab (EARL) motion platform to enable the simulated motion environment necessary for testing structural components. Software for the data acquisition system will need to be developed, in addition to interface protocols and methodologies for the structural fault injection diagnosis and mitigation algorithms.

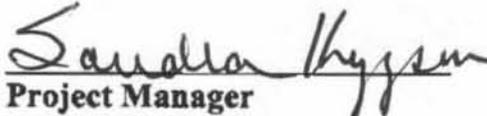
The project manager for this is Sandra Koppen. (757) 864-6209.

2. The duration of proposed action is to occur from January 2010 to December 2010.

3. The cost of proposed action is \$432,000.

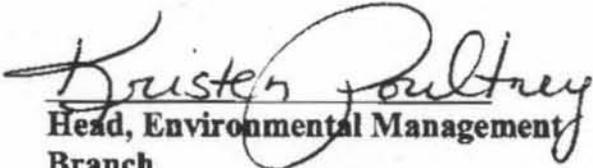
4. It has been determined that the above action qualifies for Categorical Exclusion #3 under 14 CFR 1216.305 (d), which describes NASA's Criteria for determining if an environmental assessment under NEPA is needed and has no special circumstances which would suggest a need for an Environmental Assessment. Specifically 14 CFR 1216.305 (d) (3) provides for a Categorical Exclusion for Research and Development activities in Aeronautics.

**Determination:** This action is categorically exempt from further environmental assessment based on the information provided in the project description. If there are changes to the location and scope or other aspects of the project, then this document may be invalidated and the action may be reassessed.

  
Project Manager

CONCUR  
NONCONCUR

11/20/09  
Date

  
Head, Environmental Management  
Branch

CONCUR  
NONCONCUR

11/18/09  
Date