



U.S. Department of Transportation
Federal Aviation Administration

FINAL PROJECT REPORT

Form Approved:
O.M.B. No. 2120-0059

1. Institution and Address: Clemson University Office of Sponsored Programs 300 Bracket Hall, PO BOX 345702 Clemson, SC 29634-5702	PART I - PROJECT IDENTIFICATION INFORMATION	
	2. FAA Program FAA Order 9550.7A	
	3. FAA Award Number: 2003-G-011 (FAA Proposal #: 03-P-0062)	

4. Award Period: From 10/01/2003 To 03/31/2007	5. Cumulative Award Amount \$499,829
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6. Project Title

Development of Industry Standardized Web-Based Auditing/Surveillance Tool to Minimize Maintenance Prior to Dispatch by Airlines

PART II - SUMMARY OF COMPLETED PROJECT (For Public Use)

This report outlines the development of a Web-based Surveillance and Auditing Tool (WebSAT), a system that analyzes aircraft maintenance data. Given that there are no systems available in the industry which assist in evaluation of aircraft maintenance data using standardized procedures, four different web-applications were designed and developed to achieve effective and efficient information management aircraft maintenance operations and understand trends in the errors captured through these operations. It is anticipated that using these systems will systematize and standardize the data collection, reduction and analysis of aircraft maintenance data in the aviation industry. Specifically, this research, pursued over three years, with industry partner airline at Memphis, Tennessee achieved the following objectives: (1) identify an exhaustive list of impact variables that affect aviation safety and transcend across various aircraft maintenance organizations; (2) develop data collection/reduction and analysis protocols to analyze errors for the identified set of impact variables; and (3) using the results of the aforementioned activity develop and implement a web-based application which ensures oversight of aircraft maintenance operations.

PART III - TECHNICAL INFORMATION (For Program Management Uses)

1. ITEM (Check appropriate blocks)	NONE	ATTACHED	PREVIOUSLY FURNISHED	TO BE FURNISHED SEPARATELY TO PROGRAM	
				Check (X)	Approx. Date
a. Abstracts of Theses		X			
b. Publication Citations		X			
c. Data on Scientific Collaborators					
d. Information on Inventions					
e. Technical Description of Project and Results		X			
f. Other (specify)					
2. Principal Investigator/Project Director Name (Typed) Anand K. Gramopadhye		3. Principal Investigator / Project Director Signature			4. Date 01/25/07