



Technology & Development Status Report

Aviation Program

FY 2009



Date Last Edited: 1-19-2007

PROJECT: **Flight Planning and Hazard Maps** **CENTER:** **SDTDC**

Number: 6E61P09 **PROGRAM LEADER:** Carl Bambarger

SPONSOR: **Project Leader:**

Proposer: Jim Morrison, Ivan Pupulidy

PROJECT OBJECTIVES

Hazard Maps vary from forest to forest and from region to region. Currently there are no standard symbols used to describe the various hazards which may be encountered by our aviation fleet. Current aviation maps show hazards typically over 200 feet and some maps will show as low as 150 feet. However, approved low altitude flights may be as low as 50 feet for fixed-wing aircraft and lower for helicopter operations.

A grass roots effort was started several years prior to submission of this project. During that time the groups developed requirements for hazards identification and types of hazards to be reported.

FalconView was identified as a user friendly program to perform Flight Planning and produce Hazard Maps. FalconView is a central application within the software package called Portable Flight Planning Software, PFPS. It was developed for the US Air Force by Georgia Institute of Technology in 1999 and is currently at version 3.3. FalconView is widely supported and is constantly improving. It is available free to US Government agencies.

Falconview supports GIS and can import SHP files as well as other formats. AGPS can be linked to a laptop and provide moving maps. Included with the maps are our Bird Migration Routes and Military Training Routes.

FalconView will be examined as a potential Forest Service hazard mapping standard.

- Changes to objectives:**
- Expand scope of this project to include:
 - Standardization of map symbology, description of hazards, hazard details.
 - Develop method, procedure and standards for reporting and verifying hazards below 200 feet. Provide an audit method to verify conformance of this critical function of mapping hazards.
 - Establish secure and accessible data center with updates on a monthly basis

SIGNIFICANT ACCOMPLISHMENTS

- Established TODO account and then obtained copy of FalconView Software for evaluation from US Air Force.
- Performed a local survey of two air tanker bases near SDTDC, collected various hazards maps across the United States from the aviation community. Hazards are described as a wide variety of icons and vary from one forest/region to the next.
- Establishing an account with Richmond Map Facility to receive monthly distribution of CD with update

for FalconView, and including current CADRG, ECHUM and DAFIF files.

- Perform market research to identify other products which provide similar capabilities: see US Corp of Engineers Commercial Terrain Visualization Software Product Information Survey: http://www.tec.army.mil/research/products/td/tvd/survey/survey_toc.html
- Attend training session at Hill Air Force Base.

Output:

Planned: Program scope requires expansion to address procedural requirement to support FalconView as a hazard mapping program. 2007 steering FAM committee to decide on scope change .

Actual:
