



Technology & Development Status Report

Aviation Program

FY 2002



Date Last Edited: 12-27-2002

PROJECT: **Technical Services, Aviation** **CENTER:** **SDTDC**

Number: TE01P12 **PROGRAM LEADER:** Carl Bambarger

SPONSOR: WO-F&AM **Project Leader:** Carl Bambarger

Proposer:

PROJECT OBJECTIVES

This project is to provide continuing technical support to aviation staff members in the Washington Office (WO), Regional Aviation Specialists, and field line and staff officers, who require the specialized skills and services available from this Center. This is achieved through continuing coordination and liaison between Center personnel and Washington Office staff, both Fire and Aviation Management (F&AM) and Engineering, to ensure coordinated attack on specific technical problems, and to ensure maximum benefit from these activities.

Through this project, the Center provides continuity of expertise and support in such areas as helicopter and aircraft performance, accessories and specifications, and air and ground support equipment. Activities are also provided for continued support and implementation of previously completed aviation projects, as well as continued technical awareness of developments in aviation which could affect the Forest Service flying mission.

The project provides for continued Service-wide Supplemental Type Certificate (STC) and information resource coordination; participation in selected National Boards, workshops, and training sessions; consultation to Interagency Air Tanker Board (IAB) and National and Regional Helicopter specialists; liaison with military, professional societies, academic institutions, and private flight laboratories; examination of new and promising technologies for potential implementation in the aviation program; and continued training and increased technical capabilities of the SDTDC staff.

Changes to objectives:

SIGNIFICANT ACCOMPLISHMENTS

- Completion and publication of the Aerial Seeding Study. The study compared the use of natural seed, coated seed, and pelletized seed in aerial application.
- Completed the evaluation of the Continuum Dynamics Incorporated FireDrop prediction model. The model was designed to predict ground patterns for new airtankers based on the pattern history that has been collected. The program was found to work only slightly better than the existing PatSim model. The contractor was informed and worked to improve the product. A second evaluation was completed that product and found that while better than the first version, the improvement was insignificant.
- Support to the Interagency Airtanker Board (IAB):
 - – Conducted flow checks on TBM Airtankers 63 and 64
 - – Conducted door operation conformance checks on Tanker 48
 - – Conducted static and in-flight tests on the North Carolina Dromadier SEAT with the Hatfield fire gate

- – Participated in IAB meetings
- – Analyzed flow data from Tanker 63
- – Performed consultation with AeroFlight on settings for their retardant system intervalometer

Output:

Planned: As needed throughout the year.

Actual:
