



Technology & Development Status Report

Aviation Program

FY 2009



Date Last Edited: 1-19-2006

PROJECT: Retardant Pattern Width Comparison

CENTER: SDTDC

Number: 5E51P03

PROGRAM LEADER: Carl Bambarger

SPONSOR:

Project Leader:

Proposer:

PROJECT OBJECTIVES

Overview:

The heavy, multi-engine airtankers typically produce ground patterns 150 to 220 feet wide. With the cancellation of nearly all heavy airtanker contracts, operators are designing new systems to possibly replace them, some of which produce ground patterns as wide as 400 feet but with lower coverage levels or as narrow as 75 feet with higher coverage levels. The purpose of the project is to investigate and compare suppression effectiveness of wider ground patterns with lower peak coverage levels to narrower ground patterns with higher peak coverage levels.

Changes to objectives:

SIGNIFICANT ACCOMPLISHMENTS

- 1/05/05 Discussions have started between Carl, Greg and Les as to how the project should proceed. Data collection to come in two phases. First, a series of burn tests at the wind tunnel facility in Missoula. Second, an out-door series of burn testing designed around information gathered from the first phase. Greg will propose a test matrix, including cost and duration of testing for the first phase.
- 12/13/05 Completed wind tunnel burn test series in May 2005 at the Missoula Fire Lab wind tunnel facility. Test results led to a second burn test series in July at same facility. Test procedures documented and data is organized in tabular and graphic form.
- A report is being prepared and will be published in August 2006.
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Output:

Planned: Need to write a summary report to help identify tests for outdoor wind tunnel or for additional testing at Missoula. Realistic time frame for completion of this report is August 2006.

Actual: