

TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Date: Sept. 30, 2022

Lead Agency (FHWA or State DOT): Indiana DOT

INSTRUCTIONS:

Project Managers and/or research project investigators should complete a quarterly progress report for each calendar quarter during which the projects are active. Please provide a project schedule status of the research activities tied to each task that is defined in the proposal; a percentage completion of each task; a concise discussion (2 or 3 sentences) of the current status, including accomplishments and problems encountered, if any. List all tasks, even if no work was done during this period.

Transportation Pooled Fund Program Project # <i>(i.e., SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX))</i> <u>TPF 5-387</u>	Transportation Pooled Fund Program - Report Period: <input type="checkbox"/> Quarter 1 (January 1 – March 31) <input type="checkbox"/> Quarter 2 (April 1 – June 30) <input checked="" type="checkbox"/> Quarter 3 (July 1 – September 30) <input type="checkbox"/> Quarter 4 (October 1 – December 31)	
Project Title: Development of an Integrated Unmanned Aerial Systems (UAS) Validation Center		
Name of Project Manager(s): Tommy E. Nantung	Phone Number: (765) 463-1521 ext. 248	E-Mail tnantung@indot.in.gov
Lead Agency Project ID:	Other Project ID (i.e., contract #):	Project Start Date: 9/1/2018
Original Project End Date: 8/31/2022	Current Project End Date: 2/29/2024	Number of Extensions: ONE

Project schedule status:

On schedule
 On revised schedule
 Ahead of schedule
 Behind schedule

Overall Project Statistics:

Total Project Budget	Total Cost to Date for Project	Percentage of Work Completed to Date**
\$675,000	\$522,713	89%

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date**
\$41,718	6.1%	58%

**Since end date has been extended, project percentages have been updated (estimates)

Project Description:

This study proposes to develop the basic standards, protocols, and testing requirements that a given UAS must meet and demonstrate for a particular application.

Progress this quarter (includes meetings, work plan status, contract status, significant progress, etc.):

- Hosted additional UAV pilots to evaluate and further beta test the evaluation chamber.
- Began beta testing the wind turbulence evaluation chamber This test will be used to evaluate the performance of the UAS in turbulent wind conditions to determine the effect of turbulence on the quality of the data collected.
- Held project update meeting at Purdue University on September 22, 2022.

Anticipated work next quarter:

- Continue to bring various bridge inspectors to the S-BRITE center to get real-world feedback on the test. These data will be used to finalize the scoring and test procedures for evaluating the performance of UAS within the UAS Evaluation Chamber.
- Finalize the turbulence tests along with the pilot check list and scoring rubrics.
- Finalize scoring Rubric for the evaluation chamber.
- Work with Project partners to evaluate the potential for building an additional evaluate chamber for further testing at their location. i.e., design a build an evaluation chamber that can be shipped to Utah for example for use by agencies in that region.
- Finalize the development of the “practical” testing portion of the UAS certification process.

Significant Results:

Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope and fiscal constraints set forth in the Agreement, along with recommended solutions to those problems).

Potential Implementation:

None to date