

**NEW ENGLAND TRANSPORTATION CONSORTIUM
QUARTERLY PROJECT PROGRESS REPORT**

A. PROJECT NUMBER AND TITLE:

NETC 20-3 Investigating Thermal Imaging Technologies and UAV to Improve Bridge Inspections

B. PRINCIPAL INVESTIGATOR(s) & UNIVERSITY(s):

Kevin Ahearn, PE, AECOM

C. WEB SITE ADDRESS (If one exists):

None

D. START DATE (Per NETC Agreement):

2/19/2021

E. END DATE (Per NETC Agreement):

3/31/2023

F. ANTICIPATED COMPLETION DATE:

3/31/2023

G. PROJECT OBJECTIVES:

Develop UAV-based inspection and analysis protocols using infrared thermal imaging to determine the existence and extend of concrete delamination, with emphasis on the underside of bridge decks.

H. REPORT PERIOD:

Quarter 2, 2021 (April 1 - June 30)

I. ACCOMPLISHMENTS THIS PERIOD:

Task 1 Interim Report Submitted to TC

J. PROBLEMS ENCOUNTERED (If any):

None

K. TECHNOLOGY TRANSFER ACTIVITIES:

None

L. STATUS BY TASK:

Task	Description	% Complete
Task 1	Desk scan of current technologies	100%
Task 2	Field demonstration of chosen IR/UAV models and data analysis	Not started
Task 3	Develop inspection and analysis protocols	Not started
Task 4	Draft final report, technology transfer strategy, and toolbox	Not started
Task 5	Final report	Not started

M. PERCENT COMPLETION OF TOTAL PROJECT: 10%

N. ACTIVITIES PLANNED FOR NEXT QUARTER:

The following activities are anticipated for the next quarter:

- Task 1 interim report will be revised and resubmitted based on TC review comments.
- Task 2 will be initiated once TC gives approval to begin. Work will involve finalizing bridge sites for field demonstration, coordinating with equipment vendors, and scheduling staff. Field demonstrations are anticipated to be in progress by the end of the quarter.

O. FINANCIAL STATUS:

As of: July 7, 2021

Total Project Budget: \$174,931.41

Total Expenditures: \$14,926.45

Note: This report should not require more than 2-3 pages & should be e-mailed to the NETC Coordinator so as to arrive no later than three (3) working days after the end of each calendar quarter.