

AQRP Monthly Technical Report

PROJECT TITLE	Improving Emission Rates Estimates of Commercial Marine Vessels	PROJECT #	24-003
PROJECT PARTICIPANTS	University of Houston, Ramboll, FluxSense	DATE SUBMITTED	02/11/2025
REPORTING PERIOD	From: 01/01/2025 To: 01/31/2025	REPORT #	6

A Financial Status Report (FSR) and Invoice will be submitted separately from each of the Project Participants reflecting charges for this Reporting Period. I understand that the FSR and Invoice are due to the AQRP by the 15th of the month following the reporting period shown above.

Detailed Accomplishments by Task for reporting period

- Prepared area where the FluxSense instrumentation will be housed.
- Installed the instrument rack in the boat and installed instruments, UPSs, and pumps.
- Ran sampling lines, vacuum lines, and network lines.
- Modified case that will house the Teledyne T640 and added air conditioning to the case.
- Finalized the fabrication of the canopy.
- Conducted initial multipoint calibrations.

Preliminary Analysis

None

Data Collected

None

Identify Any Problems or Issues Encountered and Proposed Solutions or Adjustments

Postdoc Travis Griggs, who was planned to operate the boat, became a full time staff lecturer. He will still participate as he is able between teaching duties, but we are in the process of hiring Chris Owen, formerly from TCEQ, as our boat operator. His agency knowledge plus offshore fishing experience should serve well for this project.

There has been a delay with purchasing contracts with DRI (canisters) and Teledyne (T640). To mitigate the impact of these delays a T640 will be loaned to the project until a new instrument is received. The VOC canisters are expected in mid-February but were not planned to be sampled early in the project anyway, as that period will be used for the field team to familiarize themselves with the timing of plumes and indicator species which will be used to trigger canister collection. The cans will be sampled after this familiarization period to maximize the likelihood of capturing good samples.

UH Division of Research also discovered that they received the wrong contract from AQRP (SOW and budget were duplicated from 24-007) and requests were sent to AQRP for correction. The PI contacted Vince and RoseAnna and received assurances that the project was OK to proceed in the field while the contract was being finalized.

Goals and Anticipated Issues for the Succeeding Reporting Period

- Install FluxSense instrument
- Finalize and calibrate instruments
- Deploy boat and begin collecting data
- Train Chris Owen on the specific requirements for operating the boat.

Detailed Analysis of the Progress of the Task Order to Date

None

Do you have any publications related to this project currently under development? If so, please provide a working title, and the journals you plan to submit to.

Yes No

Do you have any publications related to this project currently under review by a journal? If so, what is the working title and the journal name? Have you sent a copy of the article to your AQRP Project Manager and your TCEQ Liaison?

Yes No

Do you have any bibliographic publications (ie: publications that cite the project) related to this project that have been published? If so, please list the reference information. List all items for the lifetime of the project.

Yes No

Do you have any presentations related to this project currently under development? If so, please provide working title, and the conference you plan to present it (this does not include presentations for the AQRP Workshop).

Yes No

Do you have any presentations related to this project that have been published? If so, please list reference information. List all items for the lifetime of the project.

Yes No

Have any personnel changes occurred that were not listed in the original proposal? If so, please include a detailed description of the personnel change(s) below.

Yes No

Are any delays expected in the progress of the research? If so, please include a detailed description of the potential delay below.

Yes No

Describe any possible concerns/issues (technical or non-technical) that AQRP should be made aware of.

N/A

**Are you anticipating using all the available funds allocated to this project by the end date?
If not, why and approximately what is the amount to be returned?**

Yes **No**

Submitted to AQRP by
James Flynn