

AQRP Monthly Technical Report

PROJECT TITLE	Galveston Offshore Ozone Observations (GO3)	PROJECT #	20-004
PROJECT PARTICIPANTS	James Flynn (UH) Yuxuan Wang (UH) Paul Walter (St. Edward's University) Gary Morris (St. Edward's University)	DATE SUBMITTED	9/9/2020
REPORTING PERIOD	From: August 1, 2020 To: August 31, 2020	REPORT #	2

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 14th of the month following the reporting period shown above.

Detailed Accomplishments by Task for reporting period

- St. Edward's University received the complete O₃ sonde order and 2B Tech O₃ monitor parts.
- Purchased battery, alternator, cabling for science power system on the Galveston Bay shrimp boat.
- Built heavy-duty instrument chassis for offshore instrument system based on warnings from Ryan Marine Service that the M/V Red Eagle still operates in heavy seas.
- Mounted all major components in the offshore chassis.
- Replaced rusted pontoon trailer with new old-stock galvanized trailer better suited for saltwater use.
- Delivered seat cushions to upholstery shop for economy/utility grade recovering. Previously the boat had been stored outside and the seating was not serviceable.

Preliminary Analysis

No data collected.

Data Collected

None.

Identify Any Problems or Issues Encountered and Proposed Solutions or Adjustments

There are two issues at this time. The first is the schedule for deployment. While still on track relative the elapsed time since receiving the fully executed Task Order, there is little time left in the 2020 O₃ season. The first of the boat systems should be ready for deployment on the M/V Red Eagle before the end of September 2020. The second issue relates to the Galveston Bay measurement platform. Although the shrimp boat operator is still happy and willing to work with us, he has now requested a complete liability waiver. UH has been working with our Division of Research and believe we have identified a path forward. Between this delay and the time needed for UH to order the

ceilometer, efforts have focused on preparing the instrumentation for the Gulf measurements.

The PIs would like to have a conference call in the coming weeks to discuss the deployment schedule.

Goals and Anticipated Issues for the Succeeding Reporting Period

- Complete, test, and deploy the first automated package onto the M/V Red Eagle for the off-shore measurements.
- Complete assembly of second automated package for Galveston Bay.
- Receive and test CL-51 ceilometer
- Receive complete O₃ sonde order
- Complete preparations of pontoon boat

Detailed Analysis of the Progress of the Task Order to Date

All major orders have been completed. Smaller components are being purchased as needed to ensure compatibility with major components. The project is on schedule relative to the date funds became available.

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.

Yes No

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