

# Creating the Next Transatlantic Voyager

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PROPOSAL FOR THE MICROTRANSAT PROGRAM

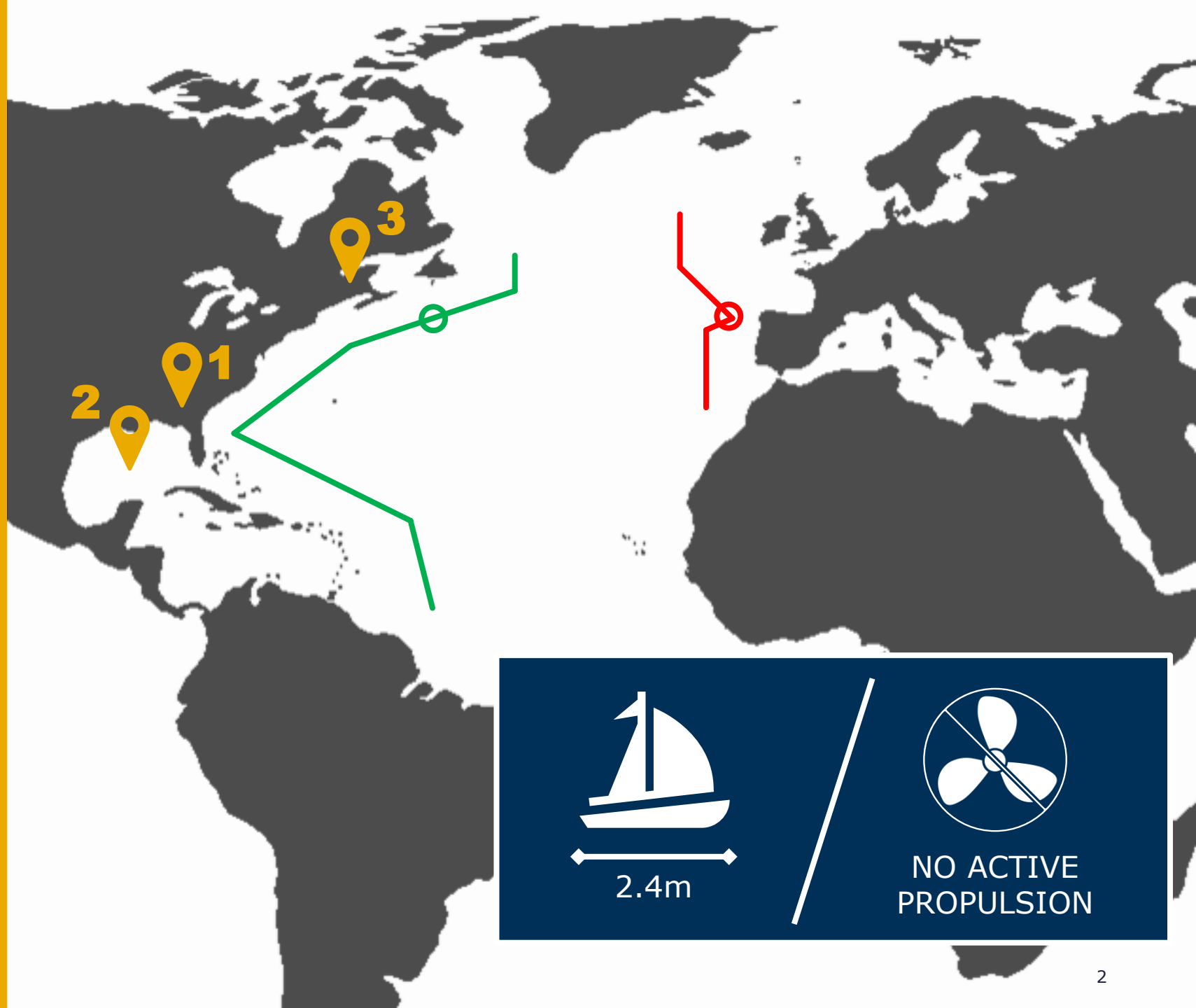
# The Microtransat Challenge

## Locations 1 & 2:

Test sites for half-scale vehicle

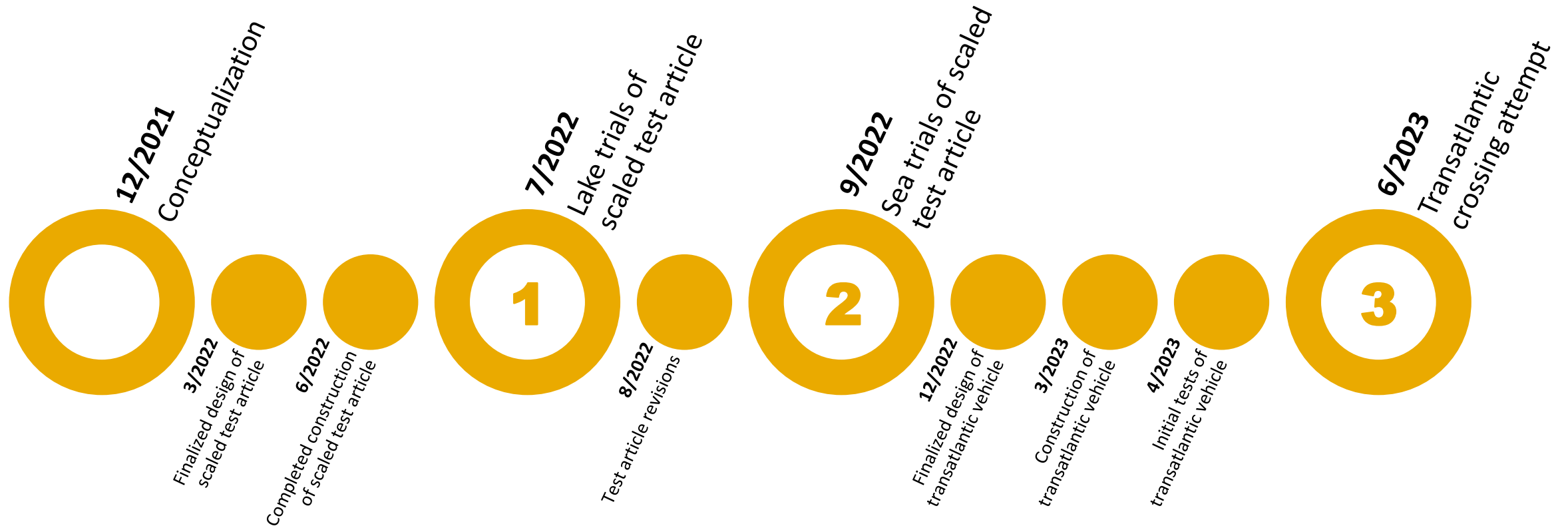
## Location 3:

Tentative launch site for full-scale vehicle



NO ACTIVE  
PROPULSION

# Timeline

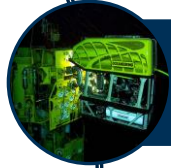


# A Novel Project

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Engineering for difficult environments with real-world applications



Organization uniquely focuses on maritime robotics



Intends to be the first collegiate team to complete this transatlantic crossing



Establishes student-led exploratory robotics on campus

# Feasibility

- Interdisciplinary project involving skills from many majors at Georgia Tech
- Recruitment on campus
  - Flyers, Online, Org Fairs
- Project has a workspace and high-level plans
- Connections in industry and research communities



# Sustainability

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Building  
platforms for  
future projects

Reusable  
modular  
subsystems

Creating a  
knowledge  
base



Satellite-based communications

Rigid wingsail with spar

Custom anemometer sensor

Camera

Solar power

Navigation and computing equipment

In-house electronics

Watertight electronics housing

Batteries

Foam composite hull

Logistics



Manufacturing equipment

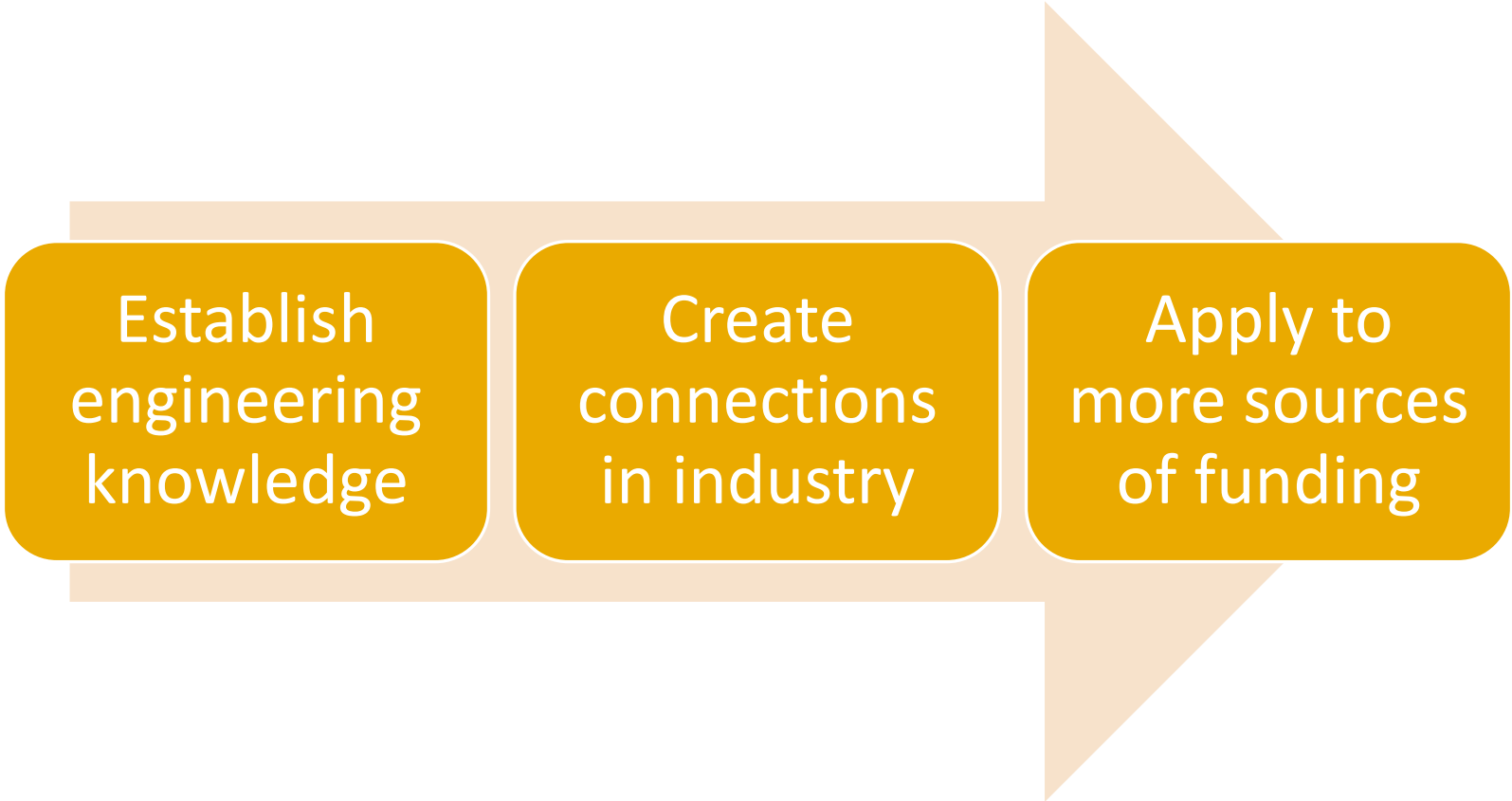


Lodging



# Looking Ahead

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Establish  
engineering  
knowledge

Create  
connections  
in industry

Apply to  
more sources  
of funding



# Impact

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## Engagement

Grow organization membership

## Knowledge

Document experiences and knowledge gained

## Student development

Observe projects started with skills gained from this project

## Career development

Track progression of careers of members

## Mission success

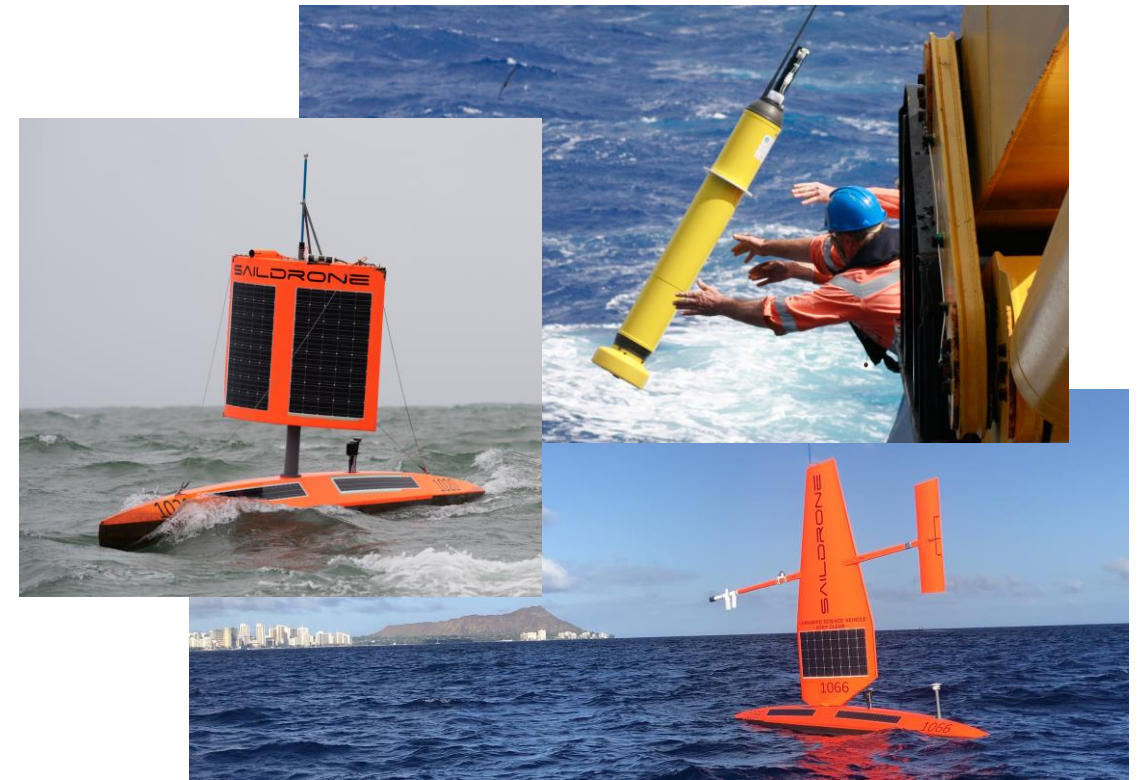
Track the vehicle to the other side of the Atlantic Ocean

# The Bigger Picture

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Maritime technologies enable us to better understand the underlying mechanisms of the world, to preserve our home, and improve it. They are an example of how science and engineering can be used in **progress and service.**

Further, we seek to show the world, that when it comes to taking on the Atlantic Ocean, **we can do that.**



# Questions?

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[MARINEROBOTICS.GTORG.GATECH.EDU](http://MARINEROBOTICS.GTORG.GATECH.EDU)