



TEC-V

Week 2 Update

...



Our Website!



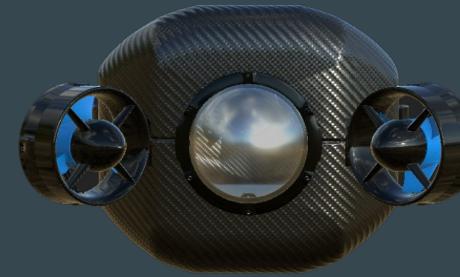
Our Insta!





Introduction

- Stephen Coster (OE) Systems Engineer
- Henry Hill (OE) ROV Technician
- Mike Dowling (CSE) Software Integration Technician
- Gabor Papp (ME) Mechanical Design Engineer



Introduction

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A photograph of a rugged, rocky landscape under a clear blue sky. A dirt path or stream bed winds its way through the center of the frame, leading the eye towards the horizon. The terrain is uneven and covered in sparse vegetation.

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Progress

- ROV Software/Configuration
- Fairing Manufacture
- Fairing Paint Scheme
- Buoyancy/Trim
- Sonar Testing



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ROV Software

- BlueOS Updated
- Thrusters Reconfigured

The screenshot shows the BlueOS software interface with the following sections:

- OVERVIEW:** Displays a 3D model of the ROV.
- PWM OUTPUTS:** Active tab, showing a table of servo functions and their current values:

Name	Value	Output
SERVO1_FUNCTION	Motor1	1500
SERVO2_FUNCTION	Motor2	1500
SERVO3_FUNCTION	Motor3	1500
SERVO4_FUNCTION	Motor4	1500
SERVO5_FUNCTION	Motor5	1500
SERVO6_FUNCTION	Motor6	1500
SERVO7_FUNCTION	MountTilt	1500
SERVO8_FUNCTION	Lights 1	1500
SERVO9_FUNCTION	Lights 2	1100
SERVO10_FUNCTION	Disabled	0
SERVO11_FUNCTION	Disabled	0
SERVO12_FUNCTION	Video Switch	1100
SERVO13_FUNCTION	Disabled	0
SERVO14_FUNCTION	Disabled	0
SERVO15_FUNCTION	Disabled	0
SERVO16_FUNCTION	Disabled	0

- Motor Test:** Shows a "Disarmed" status and four motor control sliders for Motor 1 through Motor 4, all set to 0%.



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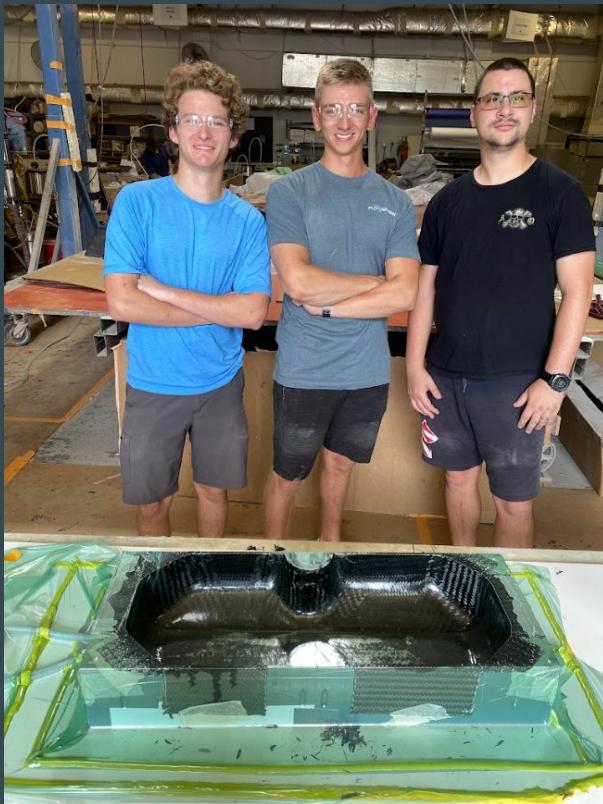
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Fairing Manufacture at S.C.



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Fairing Manufacture at S.C.

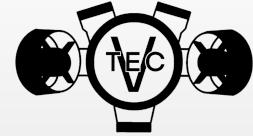


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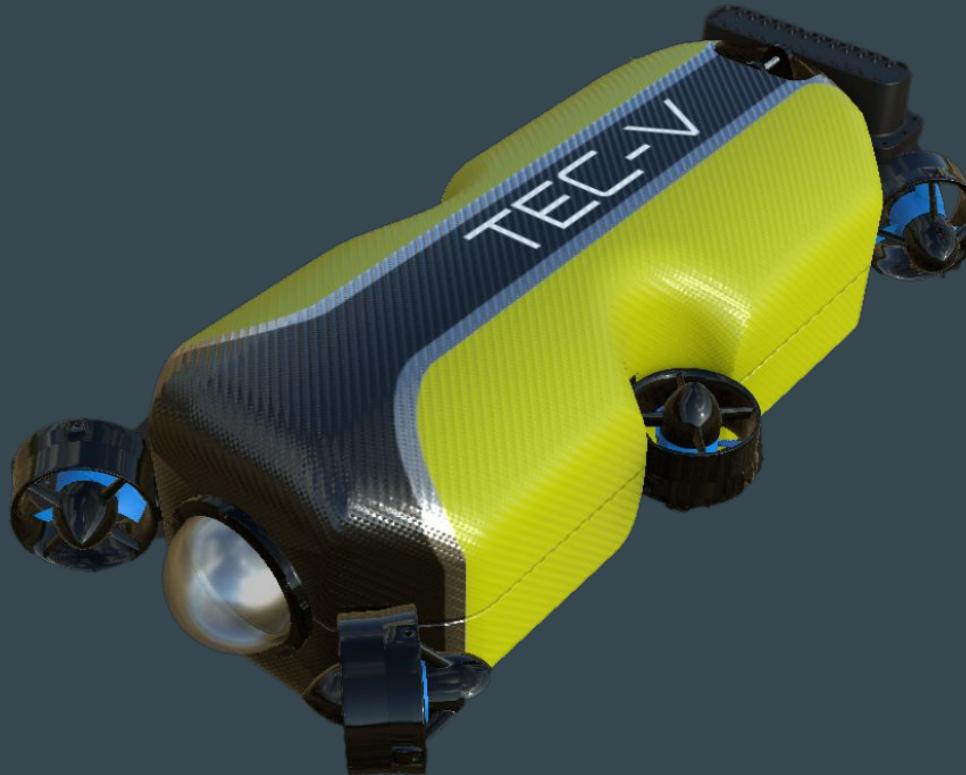
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Fairing Paint Scheme



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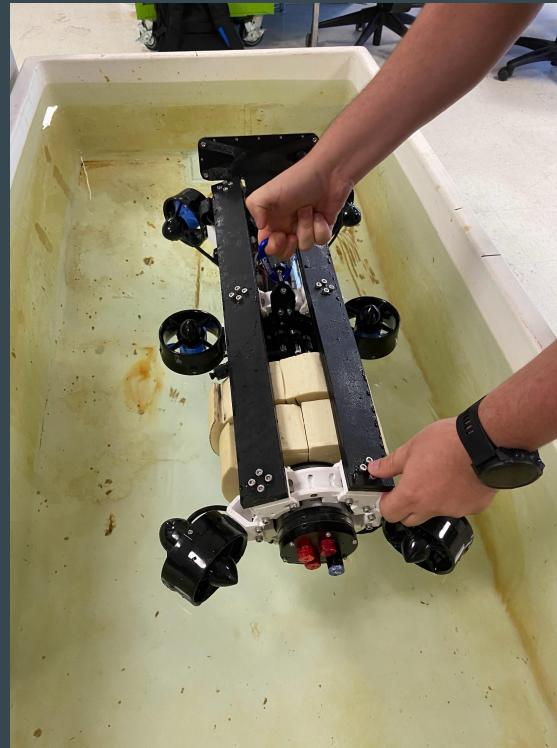
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Buoyancy and Trim

- Slightly Negative
- Minimized Righting Moment

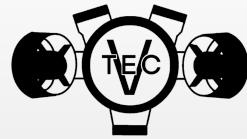


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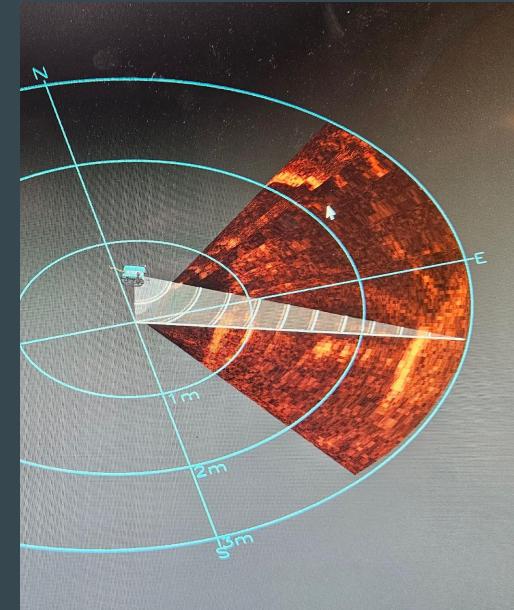
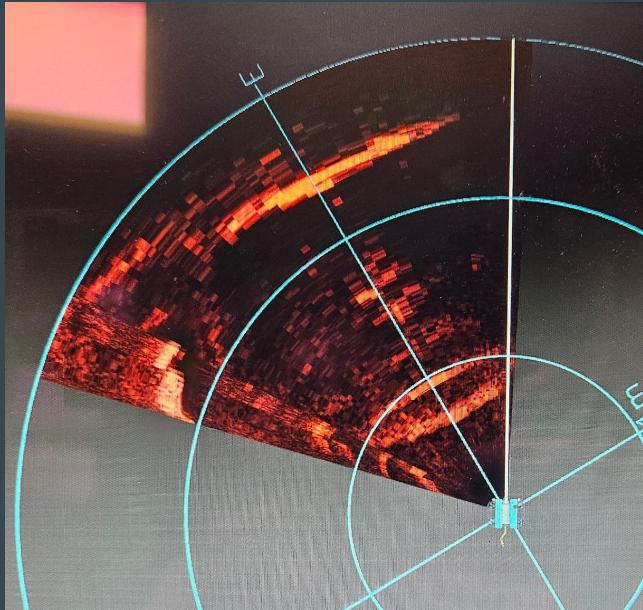
Next Steps

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Lab Sonar Testing

- Modes: Heads up, Doppler, 3D



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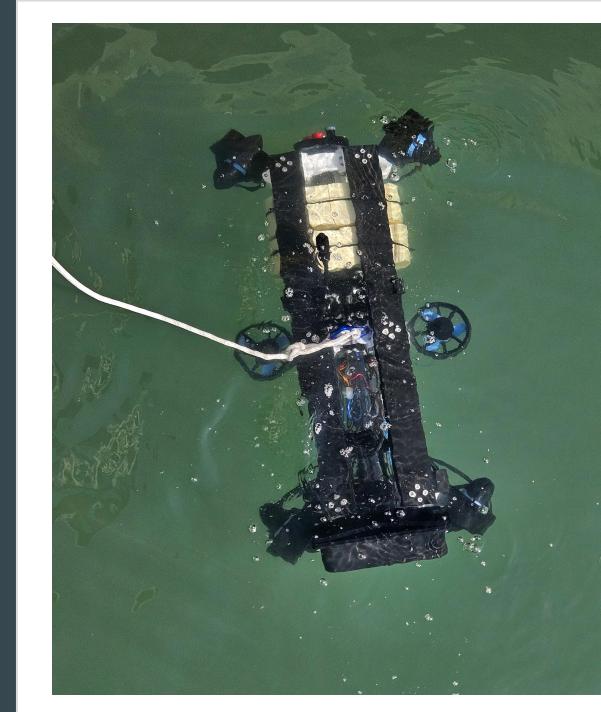
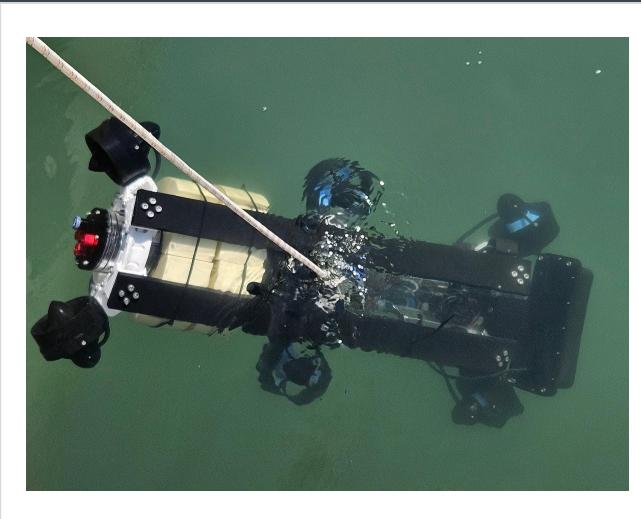
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Port Canaveral Test: Stability

- Buoyancy Adjusted to Saltwater
- Restoring Moment...
- Hydrodynamics



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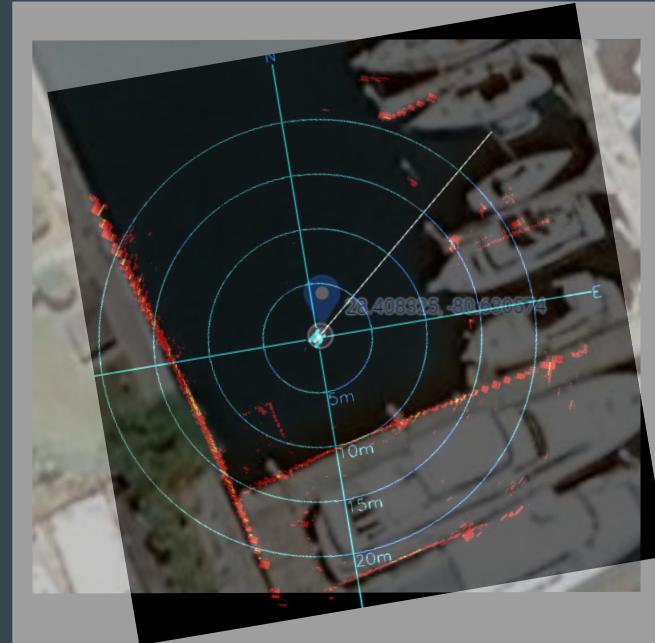
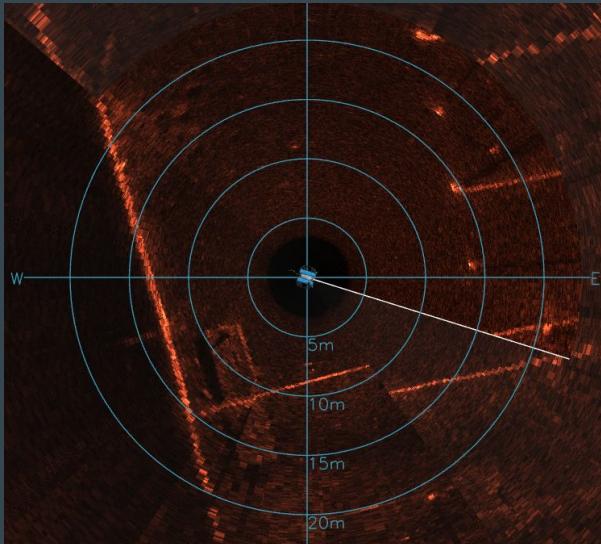
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Port Canaveral Test: Sonar I

- Software Exposure
- Navigation
- Limitations

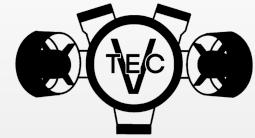


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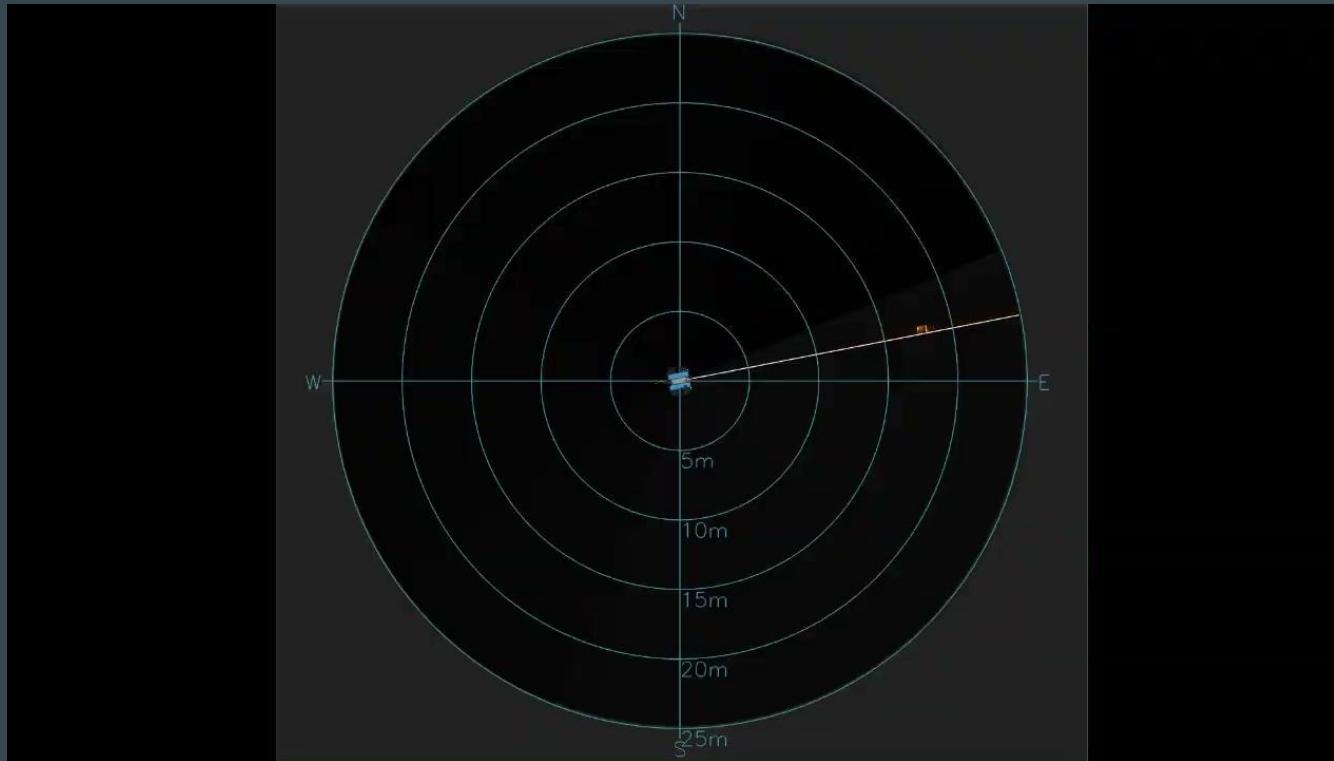
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Port Canaveral Test: Sonar II

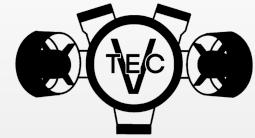


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Port Canaveral Test: Inspection

- Minimal Visibility
- Navigated to Targets
- Sonar & Camera



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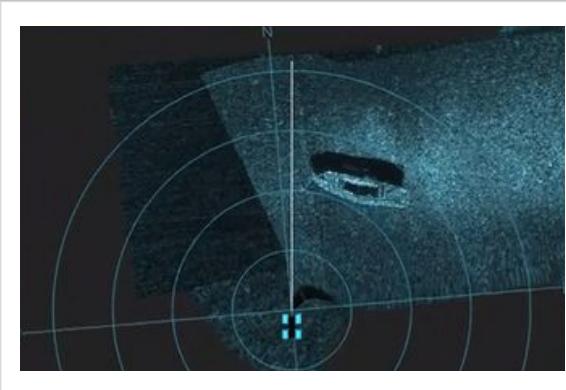
A large, semi-transparent circular graphic is centered over the image. Inside this circle, the words "Next Steps" are written in a white, sans-serif font. The background of the slide shows a close-up photograph of a rocky, uneven path or surface, possibly made of volcanic rock, with some sparse green vegetation at the bottom right.

Next Steps



Prepare for MFP

- More Deployments
- Seafloor Mapping
- Manufacture Spare Parts



ceruleansonar.com



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Fairing

- Manufacture Second Half Today!
- Fairing Post Processing at S.C.
- Begin Designing Mounts



Introduction

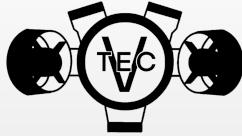
Progress

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Timeline



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WBS NUMBER	TASK TITLE	TASK OWNER	PCT OF TASK COMPLETE	PHASE ONE						PHASE TWO									
				WEEK 1			WEEK 2			WEEK 3			WEEK 4			WEEK 5			
				M	T	W	R	F		M	T	W	R	F	M	T	W	R	F
1	Sonar Integration																		
1.1	Fairing Sonar Bracket	Gabor	0%																
1.2	Front Facing Bracket	Gabor	100%																
1.3	Install Sonar on Fairing	All	0%																
1.4	Testing	All	100%																
1.5	Mapping Code	Mike	20%																
2	Fairing Design and Manufacture																		
2.1	Fabricate	All	60%																
2.2	Post Processing	All	10%																
2.3	Fairing Brackets	Gabor	0%																
2.4	Install Fairing	All	0%																
2.5	Buoyancy/ Pool Test	All	0%																
2.6	CFD	Stephen/Henry	0%																
2.7	Laminate Strength Calculations	Stephen	75%																
3	Buoyancy																		
3.1	Finish Code	Henry	80%																
3.2	Finish Modification	All	90%																
3.3	Pool Test	All	100%																
3.4	Trim Weight Sled	Gabor	100%																

MFP



Appendix

Progress

- ROV Software/Configuration
- Fairing Manufacture
- Buoyancy/Trim
- Open Water Deployment
- Sonar Mapping

Next Steps

- Prepare for MFP
- Manufacture Spare Parts
- Fairing Post Processing at S.C.
- Sonar Code Development
- Finish Buoyancy

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