

Incline without use of a Pendulum

NASSCO Technical Lead: Kendall Lee

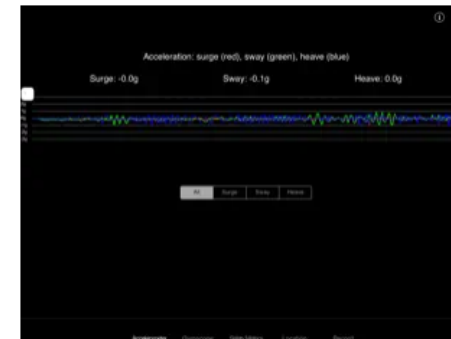
July 2026

NSRP Meeting

Project Goal

Validate ASTM F1321-21 which indicates digital measurement devices can be used in the place of a pendulum by comparing the following equipment during an incline:

1. Digital level Inclinator
2. High Precision Inclinator w/ Data Acquisition System software – Gl.bench
3. Phone with app – SCRAMP



Team Organization

PTR

Patrick Cahill
Program Technical Representative
patrick_cahill@cahillconsultingllc.com

ATI

Nick Laney
ATI Project Manager
nicholas.laney@ati.com

Jessica Volbeda
ATI Contracts
jessica.volbeda@ati.com

NASSCO

Kendall Lee
Primary NASSCO Technical Lead
kendall.lee@nassco.com

Tom Cimalore
NASSCO Project Logistics
tcimalor@nassco.com

Dillon Esposito-Kelley
Secondary NASSCO Technical Lead
dillon.esposito@nassco.com

Jessica Bowden
NASSCO Contracts
jessica.bowden@nassco.com

Monika Skowronska
NASSCO NSD
mskowron@nassco.com

AUSTAL

James Erwin
Austal Naval Architect / Launch FOS
james.erwin@austalusa.com

James Mackie
Austal Naval Architect / Dockmaster
jim.mackie@austalusa.com

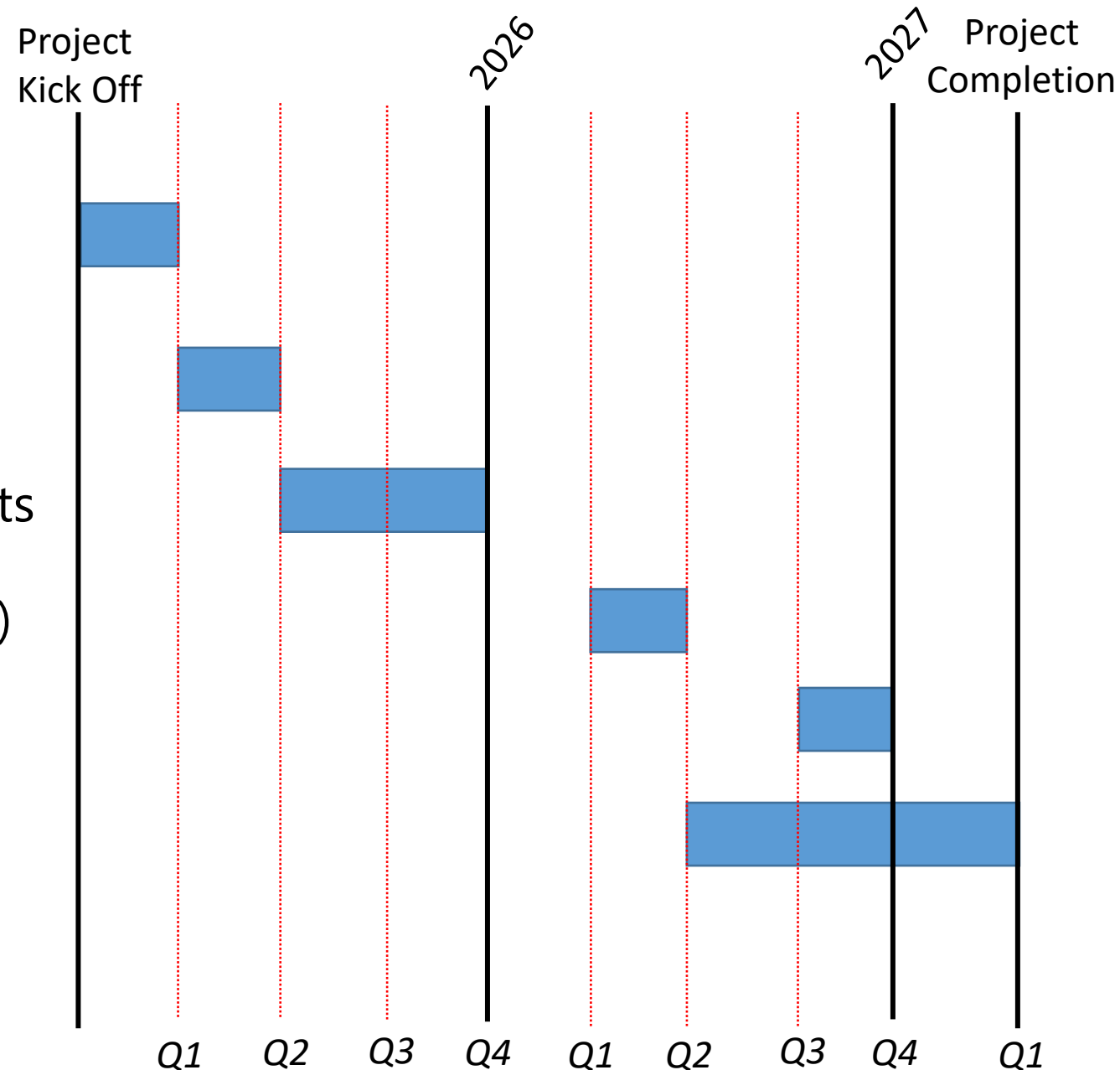
Shawn Wilbur
Austal NSD
shawn.wilber@austalusa.com

Project Progress

- NASSCO completed an incline for T-AO 4 using digital level inclinometers as a first test to further refine what was needed
- Completed kickoff meeting with Austal
- Working with ABS to ensure that the measurement methods meet requirements and will be approved
- Completed training for Data Acquisition System for high precision inclinometers
 - Implemented system during NASSCO Pontoon stability assessment as trial run

Schedule

- Stage 1: Develop Test Plan & finalize tools to be used
- Stage 2: Procure Tools for Study
- Stage 3: Tool Study & Analysis of Results
- Stage 4: NASSCO Pontoon Incline (trial)
- Stage 5: Austal LCS Incline
- Stage 5: Results & Equipment Analysis



Questions?