

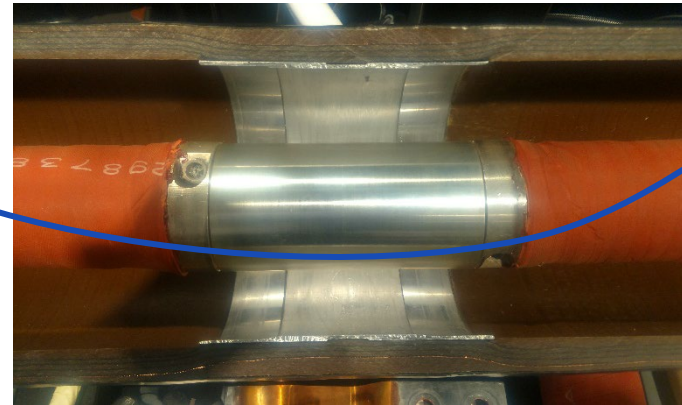
Proposed 2025 NSRP Panel Project:
**INVESTIGATION OF APPLICATIONS OF DISTRIBUTED
TEMPERATURE SENSING ON NAVAL VESSELS**
(Work in Progress)

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DTS – SHIPBOARD APPLICATIONS



Data Displayed

- LV, MV, and HV electrical panels monitoring
- Insulated Bus Pipe Connections
- **FIRE DETECTION**
- Machinery health monitoring
- Cabling systems health monitoring
- Food storage spaces
- Others...
- **Single DTS and single cable for multiple functions**



PROJECT OBJECTIVES

Investigate possible applications of the DTS technology on naval vessels.

- Use the lessons learned on the DTS integration project as baseline.
 - Use questions / feedback from technology transfer activities.
- Investigate other applications where temperature detection may identify problems / issues.
- Determine if DTS can be adapted to the application.
 - Evaluate system requirements, modifications, suitability of utilizing existing assets (example: fiber network).

PROJECT TEAM

NOTE: Project is in the early planning phase. Team members listed have not committed to participation.

- RSL Fiber Systems (Lead)
- Penn State EOC
- Silixa
- NSWCPD
- NSWCDD
- NAVSEA 05Z33
- BIW
- HII – Ingalls Shipbuilding
- General Atomics
- Other...