

Electrical Technologies Panel

Winter Panel Meeting
December 12, 2025

ZoomGov

Agenda

Time	Presentation	Speaker
10:00 am	Convene Meeting – Begin Webinar	
10:00 AM	Welcome & Introductions	Jason Farmer, Panel Chair
10:15 AM	NSRP Update	Lydia Szydlo, ATI
10:30 AM	NAVSEA 05Z3 Update	Chris Nemarich, NAVSEA 05Z33
10:45 AM	Navy Fiber Optic Specs and Standards Update	Chris Good, Brandon Nelson, NSWC Dahlgren Division
11:00 am	Panel Project Update: 15kV MIL-SPEC Cable Development for U.S. Navy Ships	Greg Keyes, Ingalls Shipbuilding Bruce Sinnott, Marmon Aerospace and Defense
11:30 am	Panel Project Update: Shipboard Fiber Optic Cables Jacket Performance Enhancements	Gio Tomasi, RSL Fiber Systems
12:00 pm	Project update: High Density Blown Optical Fiber Cable and Tooling for Shipboard Installations Qualification	Josh Seawell, Sumitomo Electric
12:30 pm	Installation of a DTS System on Navy Vessel for Electrical Plant Monitoring	Gio Tomasi, RSL Fiber Systems
1:00 pm	Overview of FY'26 Panel Projects: <ul style="list-style-type: none"> • Evaluate Nord-Lock Wedge Washers for Electrical Applications on Navy Ship • Multiphysics-Driven Arc-Fault Detection for Shipboard Electrical Systems • Shore Power Connector Testing Prototype System 	Project Teams
1:40 pm	Lighting System Updates for Future Platforms	Gio Tomasi, RSL Fiber Systems
1:50 pm	Review Action Items / Closing Remarks	Walt Skalniak, ET Panel Vice-Chair
2:00 pm	Adjourn	

* Times listed are Eastern Time Zone

Electrical Technologies Panel

Purpose

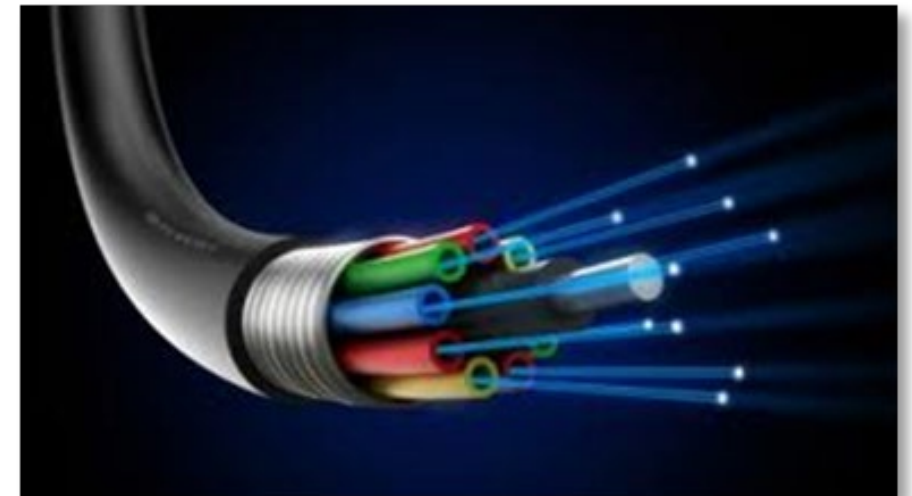
- Evaluate & transition improved electrical system technologies, installation processes, and electrical system specifications.
- Facilitate collaboration with the Navy and industry to identify & implement electrical technologies, processes, and best practices.

Goal

- The goal of the Electrical Technologies Panel is to improve shipboard electrical systems and installation processes to achieve reduced cost, improved performance, and improved safety.

Focus Areas: The panel's focus is to identify and implement technologies and processes that improve:

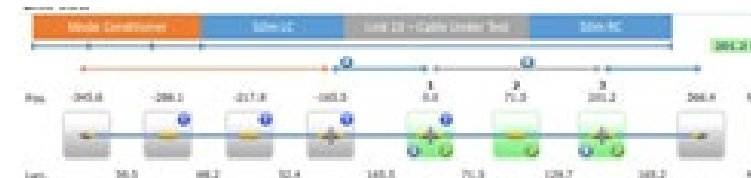
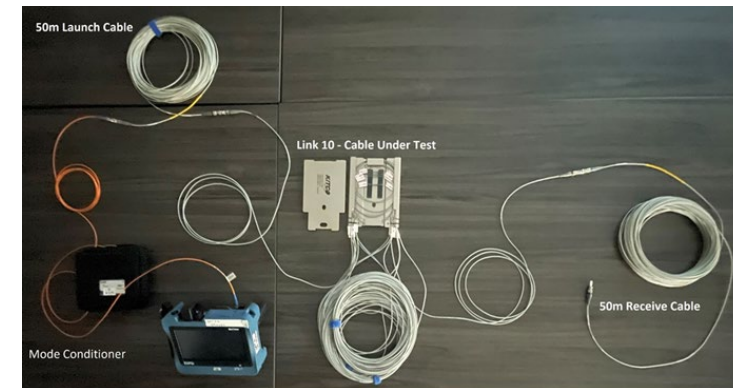
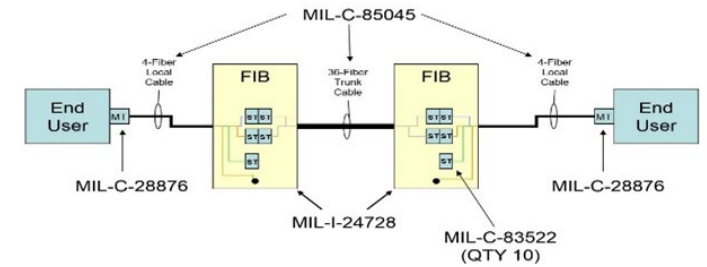
- Total Ownership Cost
- Energy Efficiency
- Electrical System Performance
- Safety of Workforce and Ship's Crew



Panel Projects

- Fiber Optic Testing Enhancement for Cost Reduction
- DOD-HDBK-289 Modernization Support

Source Launching Conditions	Source Type	Input Beam	Fiber	Output Beam
Overfilled (LED)				
Slightly under-filled (ideal conditions)				
Under-filled (VCSEL)				



MILITARY HANDBOOK
LIGHTING ON NAVAL SHIPS (METRIC)

AMSC N/A
DISTRIBUTION STATEMENT A Approved for public release, distribution unlimited

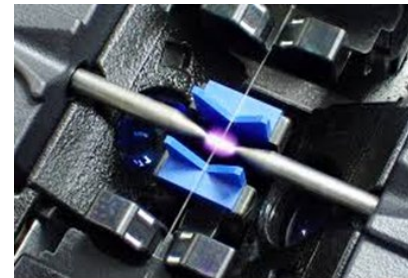
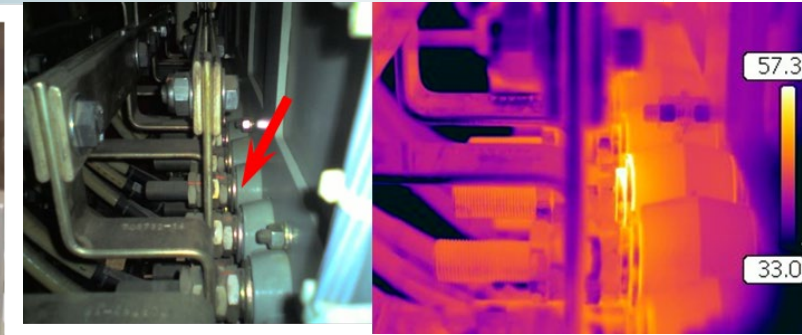
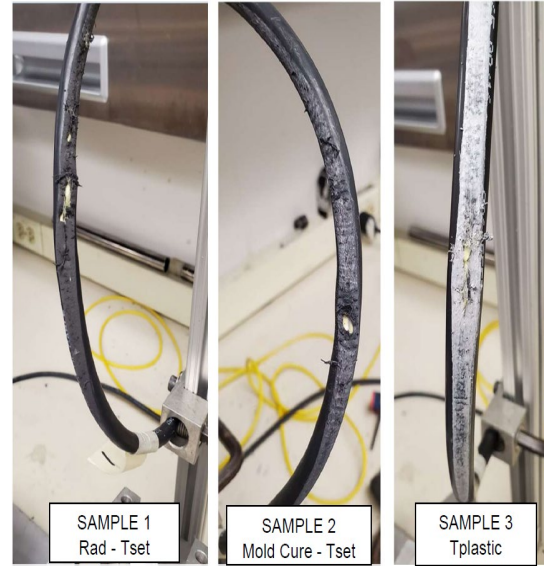
FSC 62CP
DISTRIBUTION STATEMENT A Approved for public release, distribution unlimited

METRIC
DOD-HDBK-289(SH)
26 November 1986
SUPERSEDING
NAVSEA 0964-000-2000
15 July 1974

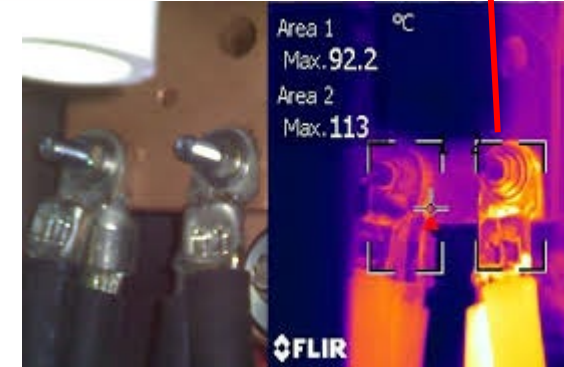
DEPARTMENT OF DEFENSE
DEFENSE INFORMATION SYSTEMS CENTER

Panel Projects

- DTS Integration Into Ship Electrical Plant Monitoring & Controls
- High-Density Ribbon Fiber Optic Cable & Tooling
- Shipboard Fiber Optic Cables Design Enhancements
(Joint Project with SWSI)
- 15kV MIL-SPEC Cable Development



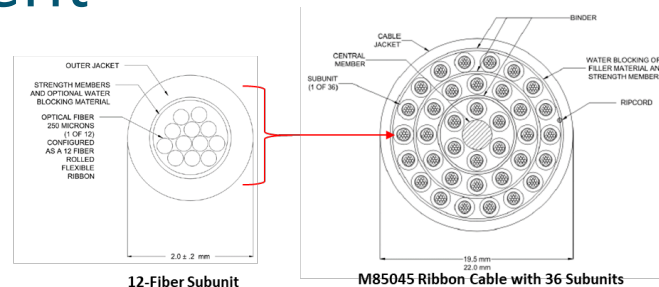
Fusion Splicer Individual Fiber



Fusion Splicer Ribbon Fiber



Standard M85045 Cable Example



M85045 Ribbon Cable Example

FY'26 Projects

- ECB Panel Project Selection Meeting November 5, 2025
- The following panel projects were approved for FY'26
 - Evaluate Nord-Lock Wedge Washers for Electrical Applications on Navy Ship
 - Multiphysics-Driven Arc-Fault Detection for Shipboard Electrical Systems
 - Shore Power Connector Testing Prototype System
(Joint Project with WFD)
- Project Teams will present an overview during today's meeting

Upcoming...

- Defense Manufacturing Conference (DMC)
 - Mar 29th – April 2nd
- Electrical Technologies FY'26 Meetings (*Draft Plan*)
 - Spring Panel Meeting
 - Late April/early May
 - Summer Panel Meeting
 - July/Aug
 - Winter Panel Meeting
 - Nov/Dec (Virtual)

Questions?



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