



TRUSTED **CI**

THE NSF CYBERSECURITY
CENTER OF EXCELLENCE

| trustedci.org

Trusted CI engagement with the US Academic Research Fleet

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Purpose of Engagement

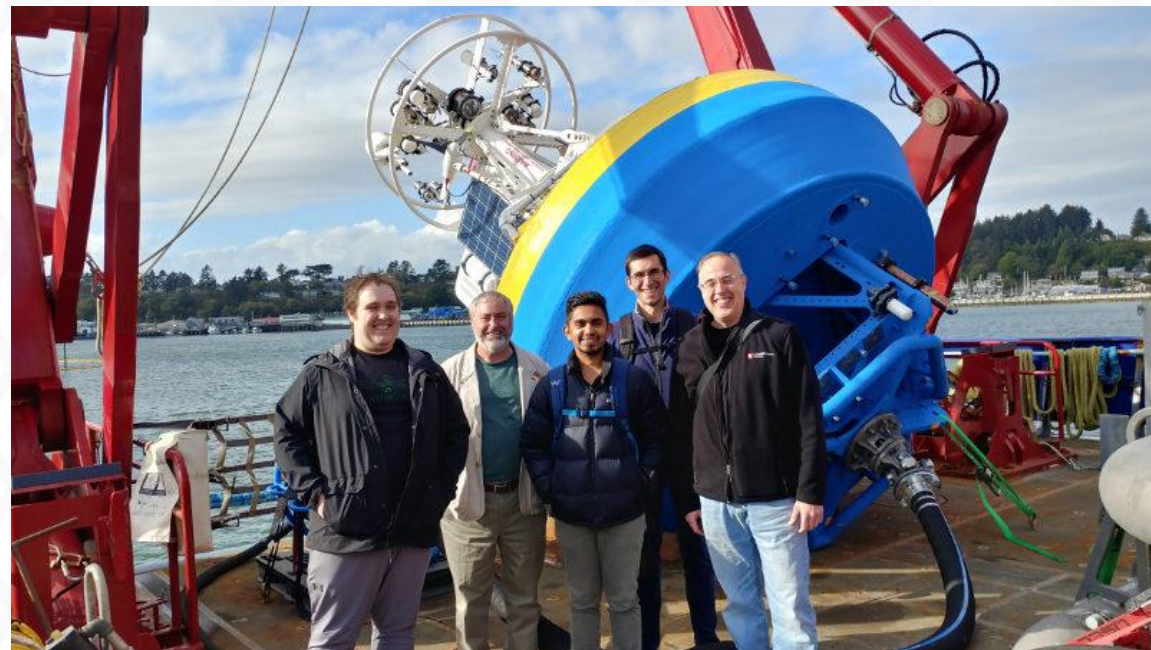
- Survey security practices of research vessels
- Survey of security threats to research vessels
- Provide resources for the RV community
- Provide recommendations to ARF

Timeline of Engagement

- 2019
 - Weekly meetings between TrustedCI and ARF from July through December
 - August 30th - Requested deadline for documentation from ship operators
 - October 2nd - Interview science party
 - October 7th - RV Sikuliaq site visit
 - October 14th - RV Sproul site visit
 - October 15-17th - NSF Cybersecurity Summit
 - October 17th - HiSeasNet site visit
 - October 22nd-24th - Attend RVTEC meeting
 - November 7-8th - RV Armstrong and RV Endeavour site visit
 - November - Final report writing stage
 - December 3rd - Send draft final report to ARF, seek feedback, revise
 - December 17th - Target date for final report.

Site visits so far (Sikuliaq, Sproul, HiSeasNet)









Security challenges observed so far that are uncommon

- It's a vehicle!
- Very short and infrequent maintenance windows
- Very low bandwidth while at sea
- Low budget for security mandates
- High crew turnover
- Science parties BYODs
- IoT everywhere
- Unique hardware
- Potentially life risking situations
- Travel to foreign ports
- Remote only access only for security checks
- Unusual console locations, sharing
- Policies that aren't compatible with institutional security controls
- Limited space / Overlapping purposes of rooms

↳ You Retweeted



Caleb Beard
@cmybeard

Got to see the engine control room of the RV Meir



1:39 PM · Oct 11, 2023 · [Twitter Web App](#)

2.5k Retweets **1.1k** Likes



Aimee Hansen @oceanette · Oct 11

Replying to @cmybeard

Uhh, there is a password in that picture on the monitor!

87

855

510



"Captain" Roberts @waswesley · Oct 11

😂😂 Thanks!

9

10

200

Cybersecurity self-assessment handout

- Available in your RVTEC folder
- Takeaway so that you can discuss with your staff
- Helps build awareness of cybersecurity risks
- Helps you identify areas where you could improve security.

Def Con 27 "Hack The Sea" Village



Trusted CI can help

Contact us to request help, from small questions to month-long engagements:

<https://trustedci.org/help/>

See also:

<https://trustedci.org/situational-awareness/>

<https://trustedci.org/webinars/>

<https://trustedci.org/ctsc-email-lists/>

<http://blog.trustedci.org/>

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