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
Caleb Beard
@cmybeard

Got to see the engine control room of the RV Mεir

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!

"Captain" Roberts @waswesley · Oct 11
😂😂Thanks!
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/
@TrustedCI
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