NSF Trusted CI Engagement Update

Lee Ellett
Summary of Trusted CI Engagement Timeline

Trusted CI:
- **July 2, 2019:** Regular weekly meetings commence
- **Jan 7, 2020:** Formal end of engagement activities. All written deliverables delivered to and accepted by US Academic Research Fleet

ARF Committee:
- **Jan 30, 2020:** regular weekly meetings
- **TARGET:** White paper response documenting fleet CI/CS recommendations complete 2-4 weeks prior to UNOLS Council summer meeting
Review Committee

John Bichy, SKIO
Lee Ellett, SIO
Ken Feldman, UW
Scott Ferguson, UH
Erich Gruebel, URI
John Haverlack, UAF
Robert Kamphaus, UW
Jon Meyer, SIO
Brandi Murphy, UNOLS
Alex Ren, LUMCON
Chris Romsos, OSU, RCRV
Ethan Roth, UAF
Laura Stolp, WHOI
Goals:
- Review of the Trusted CI Report by diverse expertise within the ARF
- Prioritize recommendations in the report
- Provide guidance as to how recommendations should be applied within the ARF
- Provide near term guidance to operators facing regulatory requirements

Activities
- Weekly telecons
- Discussing and outlining core issues
- Considering how existing UNOLS mechanisms can be applied to CI and CS
- NSF has provided some informal feedback on feasibility of recommendations
Examples of Relevant Cybersecurity Requirements

1. IMO Maritime Cyber Risk Management in Safety Management Systems
2. Defense Federal Acquisition Regulation Supplement 252.204-7012 Safeguarding Covered Defense Information and Cyber Incident Reporting
4. Personally Identifiable Information (PII) i.e.
   • Health Insurance Portability and Accountability Act (HIPAA)
   • Family Educational Rights and Privacy Act (FERPA)
Key Recommendation Topics

1. Cyberinfrastructure Plan
   • Needs to address science and operational goals
   • Fleetwide Shared Service Catalog
   • Fleetwide Identity and Asset Management
   • Cybersecurity Incident Response

2. Governance, Accountability, Roles and Responsibilities

3. Industry Standard Roles of Interest:
   • Chief Information Technology Officer (CITO)
   • Chief Information Security Officer (CISO)

4. Funding Structure Recommendations (CI vs OI/SSSE)
Topics for Council Consideration

1. The state of ARF is not in line with the CI/CS regulatory obligations and requirements of our funding agencies
2. Efficiencies can be gained for CI/CS across the ARF using mechanisms from the NSF Major Facilities Guide
3. We recommend industry-standard roles of CISO and CITO
4. UNOLS Council participation, support, input and buy-in are critical for success
5. Solving these foundational issues for ARF will produce better and more consistent scientific outcomes and field experience