

SatNAG

Satellite Network Advisory Group

2023 UPDATE



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SatNAG - Satellite Network Advisory Group

- **Advisory Group Members**

- Laura Stolp / Woods Hole Oceanographic Institution
- Ken Feldman / University Of Washington
- Erich Gruebel / University Of Rhode Island
- John Haverlack / University of Alaska Fairbanks*

- **Mission Statement**

- To steward the objective, effective and efficient use of ship to shore network resources and optimize positive customer experiences for the UNOLS fleet

- **What We Do**

- SatNAG works in good faith as advocates to the benefit of ARF over personal or home institution interests to advise NSF, the ARF community, and UNOLS Council about key aspects of satellite communication and fleetwide bandwidth management.

* John has moved on the UAF Center for Energy and Power. We wish him the best!



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SatNAG's Role

SatNAG was formed in 2016 and has been funded and directed to review and advise Jim Holik and Rob Sparrock for ARF satellite communication considerations, and other technology directions which have broader impacts to the U.S. Academic Research Fleet.

SatNAG's Role is to:

- Review ARF satellite communication service levels, market rates, performance, and priorities, broad strokes budget.
- Provide recommendations to Jim Holik regarding fleetwide technology needs and project priorities.
- Advise on ARF technology resource allocations.
- Facilitate ARF fleetwide technology collaborations.
- Establish and maintain ARF fleetwide bandwidth management policies.
- Digest and communicate complex technology decisions to the broader ARF community.



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SatNAG - 2023 Year in Review

- **Cyber Infrastructure Working Group (CIWG)**
 - Technical consulting and liaison role
- **NSF 2023 Research Infrastructure Workshop**
- **Next Generation Firewall**
 - Proposal approved November 2022
 - Formed ARF- NextGen Working Group
 - In collaboration with CIWG, HSN, ResearchSOC
- **Helped Organize RVTEC Cyber Monday**
- **Internet Use Policy**
 - satnag.unols.org/internet-use-policy
 - Need for quotas alleviated by Starlink and Navy bandwidth expansions
- **SatNAG wiki**
 - Regularly updated with current info. tips, and how-tos
 - Moving to AZURE
- **RVTEC Slack**
 - arf-cybsec channel



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SatNAG wiki

<https://satnag.unols.org/>

- **Web based documentation and searchable knowledge base**
- **U.S. ARF Maritime Cybersecurity Resources**
 - <https://satnag.unols.org/cybersec/>
- **Documented procedures and how-to docs (continual improvement)**
 - Telepresence and ship to shore solutions
 - Bandwidth management tips and tricks
 - Device maintenance
- **Links to online resources**
 - Internet Use Policy
 - Satellite System Hardware



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2024 Goals

- **Fortinet Firewall**
 - Assist in rollout
 - Evaluate effectiveness
 - Refine best practices
 - Security monitoring with OmniSOC
- **Continue collaboration with HSN, CIWG and OmniSOC**
- **Maintain the user-facing SatNAG website content**
 - Migrate to Azure to bring inline with unols.org
 - Ongoing Cyber Infrastructure/Security section
- **Work with new NSF Cyberinfrastructure Program Director**
- **Work with Jim Holik's replacement (Jim 2.0)**



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More Feedback Needed

- **We'd like to hear more about issues that vessels are facing in the networking, cybersecurity, and satcom domain**
- **We would especially like to hear more from coastal/local vessels**
- **Email at satnag@unols.org**



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Thank You!

Questions?



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Landscape in which ARF Operates

- University-National Oceanographic Laboratory System (UNOLS)
 - Includes over 60 National Laboratories involved in oceanographic research dedicated to coordinating oceanographic ships' schedules and research facilities.
- NAVY
 - Office of Naval Research (ONR)
- National Science Foundation
 - Geosciences (GEO)-> Ocean Sciences (OCE)
- Individual Operators
 - Home Institution
- Principle Investigator
 - Could be from the International Science community - write the proposal to charter the vessel - expedition
- Grant Funding Agency
 - E.g. NSF, ONR, NOAA, NASA, Other
- R2R
 - Lamont-Doherty Earth Observatory - Columbia
 - Scripps Institute of Oceanography - University of California
 - Florida State University
 - Wood Hole Oceanographic Institution

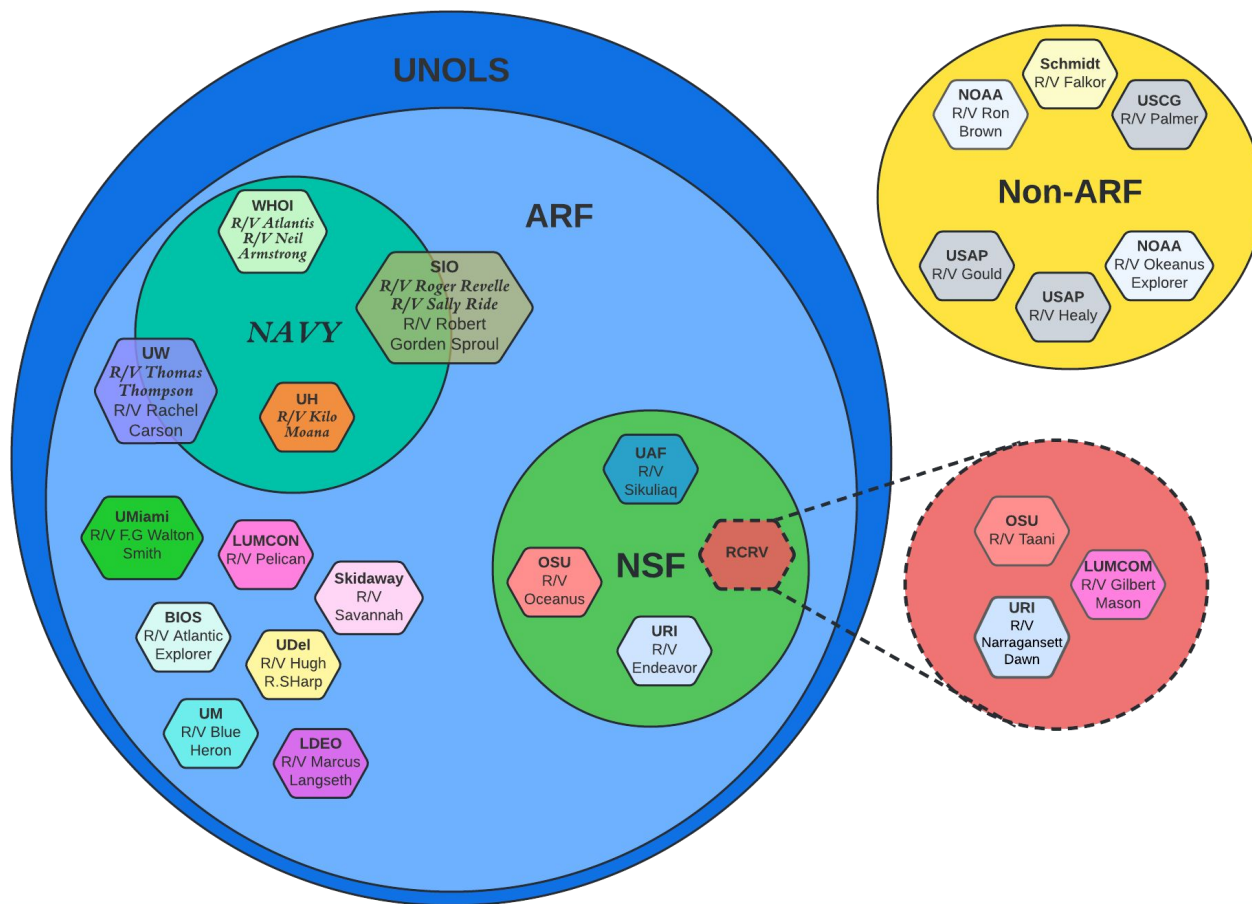


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<https://satnag.unols.org>



ARF Governance Landscape



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