



# ICE PPR

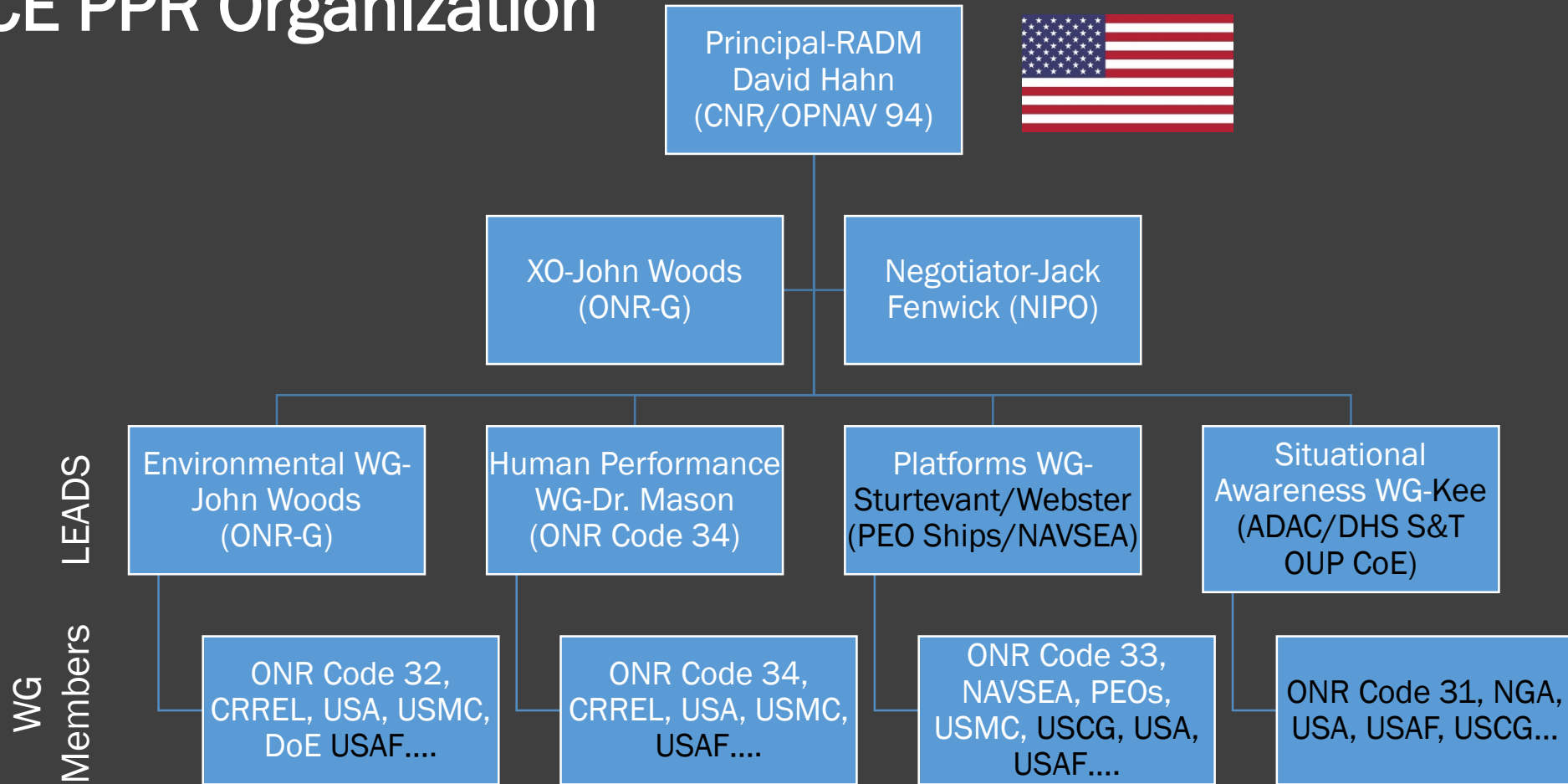
United States of America

Situational Awareness Working Group (SAWG)

Working Meeting

31 July 2020

# U.S. ICE PPR Organization



## US ICE PPR Working Group POCs:

Environmental (US ONR turning over to....) - [john.e.woods@navy.mil](mailto:john.e.woods@navy.mil)

Human Performance (ONR Code 34) - [patrick.mason@navy.mil](mailto:patrick.mason@navy.mil)

Situational Awareness (ADAC) - [rakee@alaska.edu](mailto:rakee@alaska.edu)

Platforms (US PEO Ships/NAVSEA)- [glen.sturtevant@navy.mil](mailto:glen.sturtevant@navy.mil) [james.s.webster@navy.mil](mailto:james.s.webster@navy.mil)

# ICE PPR SAWG

Working Groups (WG)

Situational Awareness WG



Understood areas of ICE PPR SAWG

Focus:

- Sensors/Source of Information
- Processing Capabilities
- Info Systems for Storing
- Bathy/Coastline (EWG collects)



*Introducing your U.S. SAWG Partners...*



## U.S. ICE PPR SAWG Delegation

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## U.S. ICE-PPR SAWG Points of Discussion

- U.S. ICE-PPR SAWG: A network of networks across U.S. military operations, Defense and Security Research Centers and even the now the likelihood of U.S. National Laboratories.
- Developing a Working Group Term of Reference
- Meeting Quarterly as desired by Danish Lead and strive as a U.S. Delegation to meet at least 1-2 times between quarterly meetings.
- Design of an overall working group framework. Creating “pillars” & “tiers” oriented to either geography, function and/or mission?
- Interconnectedness to other working groups?
- Designing a few examples of Project Agreements?
- Using a web portal to stay connected and facilitate intercessional work?
- Striving for a few quick wins?
- Being good team players...



# U.S. ICE-PPR SAWG...a quick look at the Current Team

## Included:

- Office of Naval Research
- OPNAV N26
- NAVEUR
- NAVSEA
- NG(I)A
- CRREL
- USCG Pacific Area
- ADAC
- Sandia National Labs (Just added)

## What this translates to:

- U.S. Navy's Fundamental and Applied Research Community
- HQ U.S. Navy Domain Awareness Community...oriented to Information Warfare and Maritime Information Services
- HQ U.S. Navy Europe Domain Awareness Subject Experts
- Naval Sea Systems field activities providing the engineering, scientific, technical and logistical expertise, products and support to the Fleet
- NG(I)A Maritime Community of Practice (MCoP), oriented to the Arctic and Polar Regions & domain awareness
- U.S. Army Corps of Engineering Laboratory supporting the Army cold regions warfighting...and much more.
- Science and support to U.S. Coast Guard in the Polar regions
- DHS S&T University Program Network of Arctic S&T operationally focused researchers
- National Laboratory advancing Arctic S&T research



# A discussion on framework in organizing SAWG collaboration

## Domain Orientation:

*Aggregated existing capabilities matrixed to gaps and needs oriented to “Pillars” aligned to:*

- Sea-bed to Ocean Surface
- Surface
- Air
- Space
- Cyber

Collaboration seeks to close the various domain shortfalls and gaps.

## Key Missions Tiered Orientation:

*Array of defense and security missions matrixed against known/understood shortfalls & gaps...oriented to:*

- Mission profile
  - Peacetime missions (SAR/HA/DR)
  - Crisis contingency
  - Conflict/Warfighting
- Operating medium/environment
- Current and anticipated conditions

Collaboration develops a suite of key solutions and associated needs to close the shortfalls & gaps



# A starting point for thinking about Situational Awareness shortfalls and gaps

- Communications
- Sensors/sensing networks...including radar/radar systems
- Undersea terrain/bathymetry
- Characterizing/forecasting weather and the physical operating environment
- User defined operational/spatial awareness
- Information sharing at the “speed of need”
- Understanding the change dynamics, particularly at fine scale
- Understanding/characterizing non cooperative (non-transponding) vessels and platforms
- Knowledge of how to respond in polar regions for maritime missions in comparison to lower latitudes (e.g., marine pollution response in ice laden regions is likely considerably different than non-ice-covered spaces)
- Grey Zone activities...what is/is not a threat or concern?



## Some aspects to discuss

- Polar over the horizon radars
- High Latitude Comm Studies
- Rising numbers of polar orbiting satellites
- Satellite Derived Bathymetry
- Ice Conditions mariner indexes





# How to proceed...perhaps starting with a group wide effort in understanding our “mission”?

- What is our “responsibility” vs our “interest” as a working group?
- What are shared understandings of focus areas...near vs longer term?
- Are there some natural lines of efforts we would want to pursue in subgroups?
- What are some reasonable expectations and goals to consider?
- What are the aspects of sensitivities to be aware of between delegations?
- What mission needs in situational awareness that remain unclassified?
- As a reminder...social networks aid situational awareness as well...what can we learn here?
- In the Arctic region...[what can we learn from indigenous communities](#) and traditional knowledge that aid Situational Awareness?
  - Co-production of knowledge is normalizing across Arctic Research...and we need to find a way to connect this to our endeavors as workable







## What we aim for as the US ICE-PPR SAWG

- Sharing what we are learning across our diverse team with our multi-national partners
  - Grow a bigger tent of trust...
- Gaining insights to what our multi-national partners are learning
- Make it honest and real...and avoid activities that are simply going through the motions
- Look for collaboration, experimentation and multinational opportunities
  - COVID-19 is going to slow things a bit...
- Leverage service training and readiness activities for *'incidental benefit'* to ICE-PPR
- **Draft** the SAWG TOR before the Executive's Meeting in the Fall?
- **Establish** 1 Project Agreement before Spring 2021?





Ready for discussions