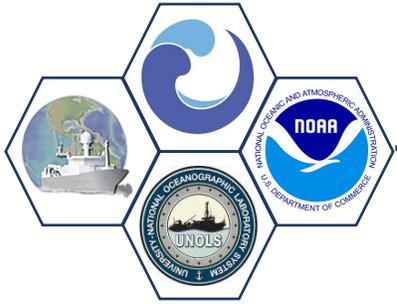




# An update on: Developing “Best” Practices for Sea-going Operations

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RVTEC 2024  
October 23rd-27th  
Portsmouth, New Hampshire



# Who are we and what are we doing?

A group of data managers, scientists, and marine technicians with the common interest of creating best practices for seagoing operations.

## Group Members & Working Group Leads



**Katie Watkins-Brandt**  
NOAA | OMAO  
Section Chief Science Services



**Kristin Beem**  
UNOLS Tech Training Committee  
RCRV Marine Science Technical Director



**Shawn Smith**  
Rolling Deck To Repository  
SAMOS Initiative  
COAPS, Florida State University



**Rebecca Hudak**  
Rolling Deck to Repository  
Woods Hole Oceanographic Institute  
Shipboard Scientific Support Group



**Mark Bushnell**  
National Coordinator, US IOOS/QARTOD  
IOC/Ocean Best Practices System Steering  
Group  
US CLIVAR Uncertainty Quantification  
Working Group



**Jay Pearlman, Ph.D. Fellow IEEE**  
IEEE France  
Director, Four Bridges  
Ocean Best Practices System Steering Group

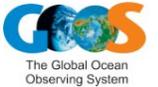


**Marine Technicians!**



# What is the Ocean Best Practices System?

- Ocean Best Practices Systems (OBPS) is a global, sustained system comprising technological solutions and community approaches to enhance management of methods as well as support the development of ocean best practices.
- OBPS partnered with Frontiers to host the repository.
- The first Best Practice that RVTEC folks published was on the C-Star Transmissometers in 2020.



<https://www.oceanbestpractices.org/>

The screenshot shows a search result for 'Transmissometer' on the Ocean Best Practices website. The search bar at the top contains 'TRANSMISSOMETER' and shows 52 results. The first result is titled 'Best Practices for Shipboard Underway Transmissometers, Version 1' by Smith, Shawn R., Forcucci, Dave, Goes, Joaquim, Hudak, Rebecca, Mishonov, Alexey, Stolp, Laura, Watkins-Brandt, Katie. The abstract mentions 'Data to Record and Provide to Users What do science users want from an underway transmissometer?... Figure 1: Explanation of data output from the C-Star Transmissometer. 4... It is important to document how your transmissometer is installed on your ship, noting whether or not... water flow into the transmissometer happens downstream of a bubbler and if a flow meter exists to... Underway Transmissometer Cleaning and In-situ Calibration A clean transmissometer is crucial to obtaining...'. The page includes options to 'View Tags', 'Explore Document', and 'Generate Citation'. The footer shows the IODE logo, copyright information for 2020, and the URL: https://repository.oceanbestpractices.org/handle/11329/1275.

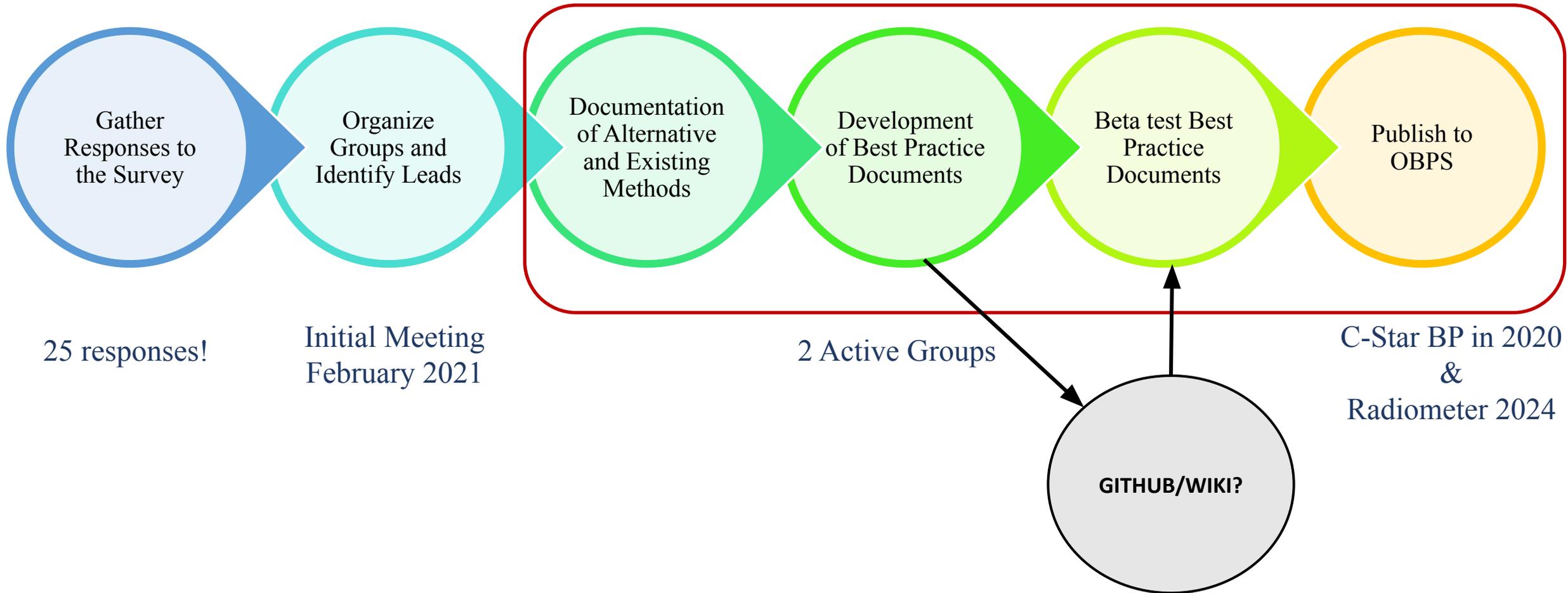
The screenshot shows the homepage of the Ocean Best Practices website. The header includes navigation links: About, Repository, Journal, Training, Community Engagement, Publications, Projects, Ocean Practices for the Decade, News, Events, Contact/Feedback. The main content area features a large banner with the text 'OBPS Workshop VII' and 'Ocean Best Practices System Our Vision'. Below the banner are four columns of text:
 

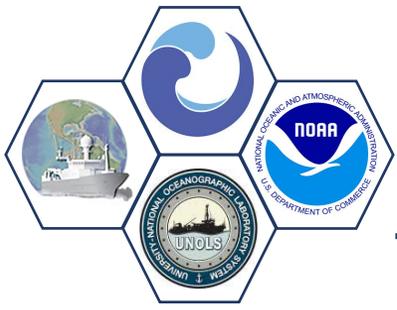
- What is a Best Practice?**: A best practice is a methodology that has repeatedly produced superior results relative to other methodologies with the same objective; to be fully elevated to a best practice, a promising method will have been adopted and employed by multiple organizations.
- What is the OBPS?**: The OBPS is a global, sustained system comprising technological solutions and community approaches to enhance management of methods as well as support the development of ocean best practices.
- Best Practices in the Repository**: Search for a Best Practice, Submit a Best Practice, Metrics.

 The footer includes 'POWERED BY Element 84', 'OceanKnowledge Tagger', and a 'SUBMIT BEST PRACTICE' button.



# Our Approach





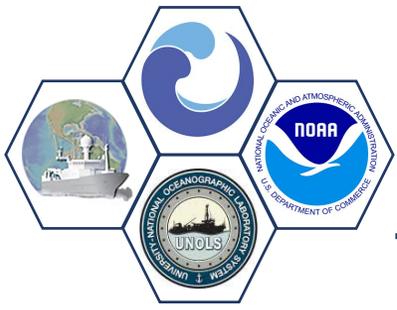
## 2 Active Working Groups Established

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### Active Working Groups:

- CTD Profiler, led by Rebecca Hudak
- EK80 Fisheries Sonar Suite, led by Rebecca Hudak and Kristin Beem
- General Flowthrough System, led by Shawn Smith- on hold





# CTD Profiler

Interested?  
Email: [rhudak@whoi.edu](mailto:rhudak@whoi.edu)



- Started meeting in September 2021
- Collaboration with Seabird over several meetings
  - including software updates
  - updated cleaning procedures
  - Beta testing of new software (Fathom)
- Check out our breakout session (Wed 1pm Squamscott room)
- Developed CTD plotting software available on R2R github! Check out our poster for more info!

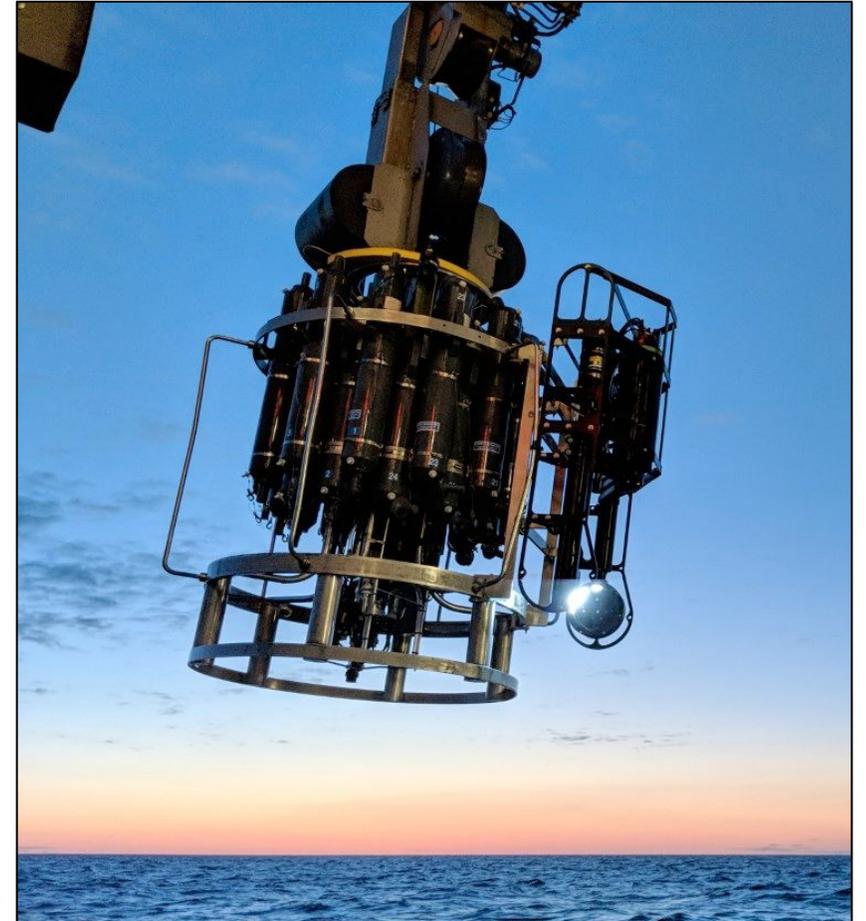
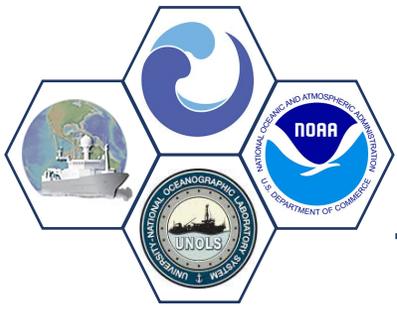


Photo cred: Emily Shimada





# EK80 Fisheries Sonar Suite

Interested? Email us!

[rhudak@whoi.edu](mailto:rhudak@whoi.edu)

[kristin.beem@oregonstate.edu](mailto:kristin.beem@oregonstate.edu)



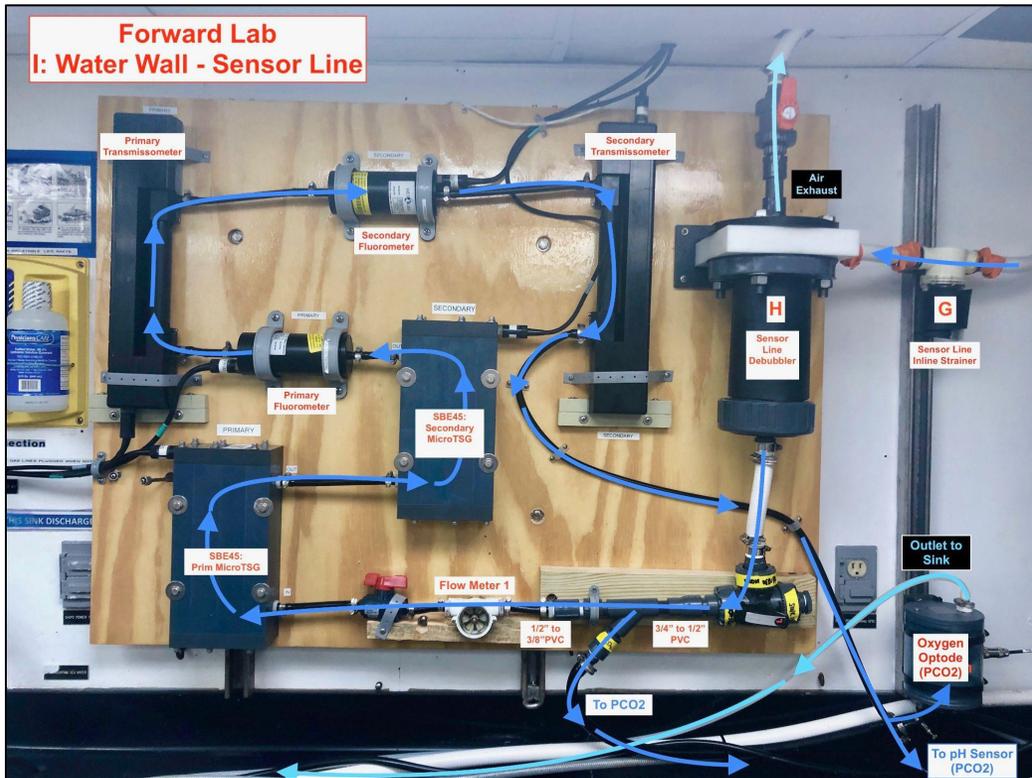
- Meet monthly for discussion
- Took a brief break during active sailing season
- Many active members contributing; including those from NOAA, UNH, OSU, URI, and WHOI
- Discussion with Kongsberg reps to answer our big questions
- Email Kristin or Becca for a link to the latest EK80 draft
- Current Working Draft for EK80 Best Practices- Reviewed all comments from last year, added new ‘Operation’ Section
- Check out our Breakout session! (Wed 2:15pm Squamscott room)





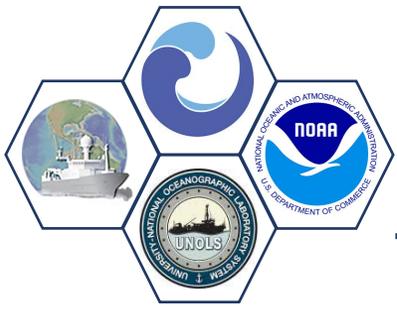
# General Flowthrough System

Interested?  
Email: [srsmith@fsu.edu](mailto:srsmith@fsu.edu)



Atlantic Explorer flowthrough system with flow direction marked.  
Photo courtesy of BIOS.

- Group inactive at the moment
  - Workload of in-service techs and group lead makes progress slow
- Primary scope
  - Focus on components of flowthrough system
    - Intakes, sea chest, pipes/tubing, pumps, flow meters, debubblers
  - Will not address specific sensors in system, but may recommend sensor placement, orientation, etc.
- Will have a working session during RVTEC
  - Plan is to collect information on challenge areas
  - Discuss how to disseminate content while document is still in draft



# 2024 RVTEC Breakout Sessions

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- In case you are interested- [Radiometer Breakout](#) yesterday about recently [published BP Document](#)
- Best Practice Breakouts (Wednesday, Oct 23rd @1300 in Squamscott)
  - 1300-1400: CTD
  - 1415-1515: EK80
  - 1530-1630: General Flowthrough

Please come and participate in these working sessions!



## Interested?

### Get involved!

- Reach out to the lead of the working group you are interested in joining
  - CTD Profiler: Rebecca Hudak [rhudak@whoi.edu](mailto:rhudak@whoi.edu)
  - EK80: Kristin Beem: [kristin.beem@oregonstate.edu](mailto:kristin.beem@oregonstate.edu) , Rebecca Hudak [rhudak@whoi.edu](mailto:rhudak@whoi.edu)
  - General Flowthrough System: Shawn Smith: [srsmith@fsu.edu](mailto:srsmith@fsu.edu)
  - Radiometers (international group): Contact Shawn Smith: [srsmith@fsu.edu](mailto:srsmith@fsu.edu)
- Know someone great that may be interested, let them know!
- Interact with us on our Whova channel- Best Practices

