

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

RVTEC 2023 October 23rd-27th Honolulu, Hawaii













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 Environmental Data Acquisition Manager



Kristin Beem UNOLS Tech Training Committee RCRV Marine Science Technical Director



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



Laura Stolp Rolling Deck to Repository Woods Hole Oceanographic Institute Shipboard Scientific Support Group



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



Jules Hummon UHDAS ADCP University of Hawaii

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



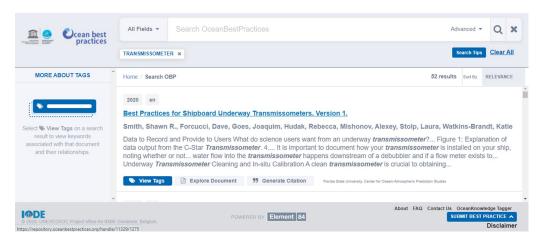
Marine Technicians!



What is the Ocean Best Practices System?

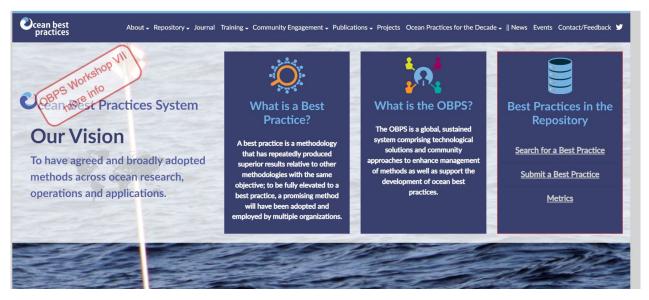
- Ocean Best Practices Systems (OBPS) is a global, sustained system comprising technological solutions and community approaches to enhance management of methods as well as support the development of ocean best practices.
- OBPS partnered with Frontiers to host the repository.
- \circ $\,$ The first Best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

the C-Star Transmissometers in 2020.



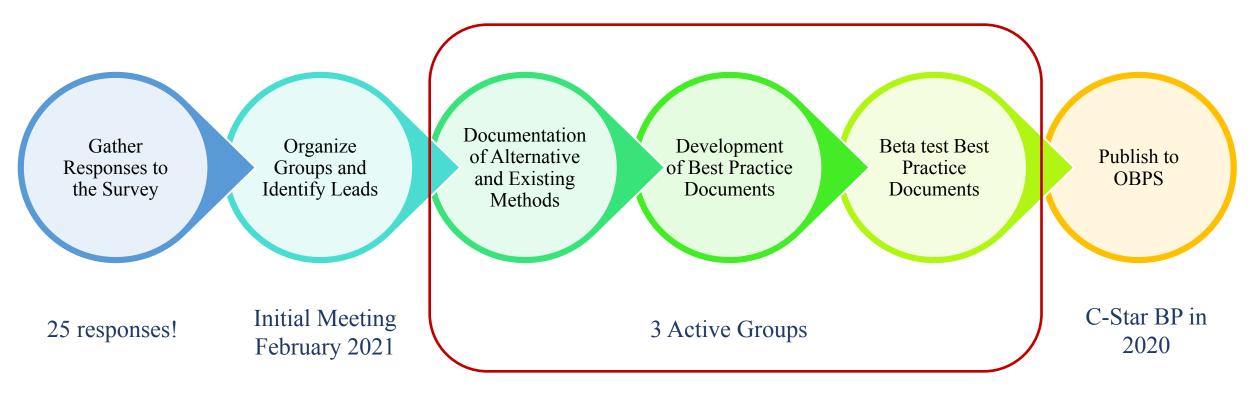


https://www.oceanbestpractices.org/





Our Approach





Active Working Groups:

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





CTD Profiler

Interested? Email: <u>lstolp@whoi.edu</u> or <u>rhudak@whoi.edu</u>



- Started meeting in September 2021
- Collaboration with Seabird over several meetings
 - \circ including software updates
 - updated cleaning procedures
 - Beta testing of new software
- Working with programmer to develop CTD plotting software (will be available via GITHUB)

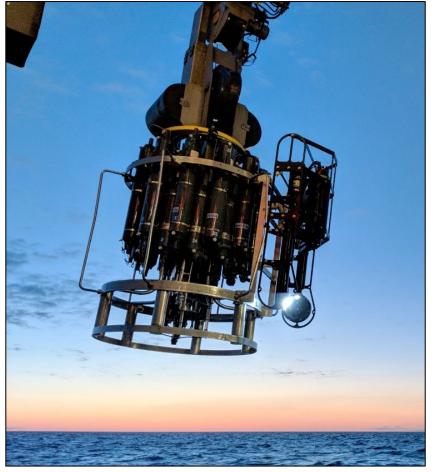


Photo cred: Emily Shimada



EK80 Fisheries Sonar Suite

Interested? Email us!

rhudak@whoi.edu

kristin.beem@oregonstate.edu





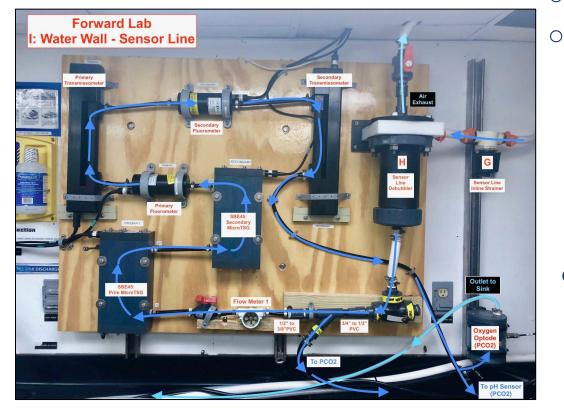
- Meet monthly for discussion
- Took a brief break during active sailing season
- Many active members contributing; including those from NOAA, UNH, OSU, URI, and WHOI
- Discussion with Kongsberg reps to answer our big questions
- Email Kristin or Becca for a link to the EK80 draft
- First Draft for EK80 Best Practices- Includes a strong focus
 on calibrating an EK80 as well as a focus on settings/features
 to run to get the best data



General Flowthrough System

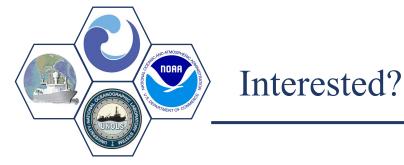






Atlantic Explorer flowthrough system with flow direction marked. Photo courtesy of BIOS.

- Restarted in 2023
 - 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.
- o New topics
 - How to document intakes in use on cruise
 - Documenting intake location, pipe runs
 - Use of shipboard technical event logs
- o Will need input from ship engineering groups and science users





Get involved!

 $\circ\,$ Reach out to the lead of the working group you are interested in joining

CTD Profiler: Laura Stolp: <u>lstolp@whoi.edu</u>, Rebecca Hudak <u>rhudak@whoi.edu</u>

EK80: Kristin Beem: kristin.beem@oregonstate.edu, Rebecca Hudak rhudak@whoi.edu

General Flowthrough System: Shawn Smith: <u>srsmith@fsu.edu</u>

Radiometers (international group): Contact Shawn Smith: srsmith@fsu.edu

- $\circ~$ Know someone great that may be interested, let them know!
- Interact with us on our Whova channel- Best Practices

https://whova.com/portal/webapp/rvtec_202310/CommunityBoard/topic/1955359



2023 RVTEC Breakout Sessions

• Best Practice Breakouts (Oct 25 @1300 in Garden Lanai)

- 1300-1400: CTD
- 1400-1500: EK80
- 1500-1600: General Flowthrough

Please come and participate in these working sessions!

Check out the polls on Whova for the CTD, EK80, and General Flowthrough