

Oceans 2017 Tutorial Proposal Submission

“Optimizing Ocean Observing: An Instrumentation Workshop”

Presenter:

Chris Kontoes, RBR Ltd.

Ocean observations, as fundamental and exciting as they are, can also be quite the daunting task. As an instrumentation provider, RBR has recognized that those that take the time to become familiar with, care for, and understand the limitations and strengths of their equipment often have the greatest successes in the field.

1. Topic Overview

This FREE workshop will focus on improving the technical ability of field going personnel. We will focus on best practices, practical maintenance procedures, deployment considerations, and a few tips and tricks to help get the most from your ocean observing equipment. In addition, we'll introduce some theory behind common sensor technologies and utilize the latest functionalities in Ruskin; RBR software compatible with both Mac and PC's. The material covered is applicable to a wide variety of common oceanographic instrumentation.

2. Target Audience

We invite field technicians and those charged with deploying instrumentation from all levels of expertise to share ideas, thoughts, and experiences. This workshop is intended as a forum to spark interests in understanding oceanographic sensors and how they work, improving the quality of field data, increasing deployment success rates, and improving the safety of those conducting the observations. 15-20 attendees would be ideal, but more would certainly be welcomed (space permitting).

3. Content Details

- Typically a 2-4hr workshop

How long?	Section	Description	Presenter
15-30min	Introduction		
		Self Intro	CK
		RBR overview	CK
20-40min	Practical Maintenance		
		Connectors/cables	CK
		Batteries	CK
		Desiccant	CK
		O-rings	CK
		Cleaning	CK
		Anti-fouling	CK

10-15min	BREAK		
15-30min	Deployment Planning – Tips and Tricks		
		Aliasing	CK
		Instrumentation Programming	CK
20-40min	Field Deployments – Best Practices		
		Prep/bench& dunk tests	CK
		Mounting – general and metals (include cables	CK
		Cable Care	CK
		Salinity/CTD specific	CK
10-15min	BREAK		
20-30min	Data Visualization/ Tier1-QC and Processing		
		Timeseries Analysis	CK
		Profiling Analysis	CK
		Data files and Metadata	CK
		RSKtools (Matlab Toolbox)	CK
20-40min	Sensor Technology		
		Purchasing considerations	CK
		Spec sheet definitions – ACC/RES/Drift	CK
		C, T, and D sensors	CK

4. Format

Intended to be a fairly “hands on” workshop, we’ve found that a classroom type setting (i.e. tables and chairs facing a presentation screen and speaker) has worked best. This allows attendees a surface to open and inspect instrumentation as well as a surface for utilizing a lap top as necessary. We request a presentation screen and projector in addition to the seating. If <20 attendees, I do not believe we’ll have any audio needs.

5. Additional supporting materials

- 1) CV for Chris Kontoes attached
- 2) Chris Kontoes is currently an Applications Engineer and Technical Sales Manager at RBR Ltd. His expertise is in facilitating equipment acquisitions and in providing suggestions and insight in regard to choosing the most appropriate instrumentation based on application needs.

With nearly a decade of experience as a Marine Instrumentation Technical Specialist at the University of Hawaii at Manoa, Chris has extensive field experience and has managed hundreds of deployments. From SCUBA and small boating deployments to large shipboard mooring operations, he has a well-rounded background in ocean observing. In 2013, Chris transitioned from academia to the world of instrumentation

manufacturing where he has since worked very closely with ADCPs, CTDs, and water quality sensors.

- 3) Ocean observations, as fundamental and exciting as they are, can also be quite the daunting task. As an instrumentation provider, RBR has recognized that those that take the time to become familiar with, care for, and understand the limitations and strengths of their equipment often have the greatest successes in the field.

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- 4) N/A, single presenter.
- 5) Chris Kontoes, chris.kontoes@rbr-global.com (858) 291-2113, www.RBR-Global.com
- 6) See attached selected slides as sample of presentation. These are just a few example slides pulled from a previously held workshop that represents some of the topics being covered.