

CTD Operations Manual

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October 23, 2019

Quiz Time!

- What is ODF, GO-SHIP, and why are we talking?
- What resources are available at sea?
- How many people here have had formal training on CTDs?
- How many here want better training, documentation (paper and digital) on CTDs?

Why?

- Need internal training material for ODF/justify to science party
- Ships have slightly different protocols, techs have different experience levels
- GO-SHIP does not have a recommended section on this

CTD Methods

Notes on CTD/O₂ Data Acquisition and Processing Using Seabird Hardware and Software
(as available)

*K. E. McTaggart, G. C. Johnson, M. C. Johnson, F. M. Delahoyde,
and J. H. Swift*

CTD Oxygen Sensor Calibration Procedures

H. Uchida, G.C. Johnson, and K.E. McTaggart

Calculation of the Thermophysical Properties of Seawater (2010)

*T.J. McDougall, R. Feistel, D.G. Wright, R. Pawlowicz, F.J. Millero,
D.R. Jackett, B.A. King, G.M. Marion, S. Seitz, P. Spitzer, and C-T.A. Chen*

A Manual for Acquiring Lowered Doppler Current Profiler Data

*A.M. Thurnherr, M. Visbeck, E. Firing, B.A. King, J.M. Hummon,
G. Krahnemann, and B. Huber*

What?

- Operational basics
 - Links to documentation of construction, deck operations, watch standing instructions
 - Checklists for above
- Troubleshooting examples
 - Taken from previous cruises
 - Subtle transmission errors
 - Sensor failures
 - Environmental caused problems (ice, biofouling, oil, etc)
- Digital and Paper form
 - Use Sphinx to make website and pdf
 - Example website layout: <https://exchange-format.readthedocs.io/en/latest/>

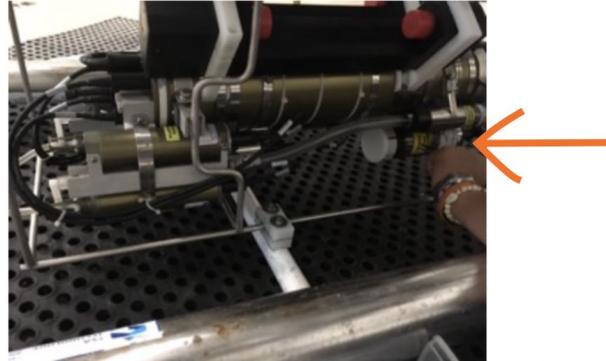


Figure 3. Example of how NOT to install the FLBB. Instrument is not facing free water which resulted in artificially elevated scattering values.

Progress

- **Done**
 - Sensor/package construction
 - 40-50% troubleshooting text (Seasave figures to come)
 - Watchstanding procedures (what to do, what to look out for)
- **To Do**
 - Checklists for everything
 - CTD/Rosette/sea cable construction
 - Pictures and Graphs
 - Lots of text
 - Public review

Comment time - what's missing/not needed?

https://docs.google.com/document/d/1WRNqfK-GB4Qf_CYu7yMqtv_b5iP1NclN2fv_mnlOqVSo/edit?usp=sharing

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