

High-density XBT cruise AX080714 report

Ship : Maersk Vilnius

Call sign : 9V8503

Ship rider : Alistair Blair

Dates XBTs deployed : July 1st to July 22nd 2014

- a) **XBTs deployed : 517**
- b) **Floats deployed: 11**
- c) **Profiling drifters deployed: 8**
- d) **Equipment tools and supplies needed:** Batteries for headlamp (3 AAA) and silicon spray
- e) **Problems:** Problems arose with the XBT system when I cleaned the CAT5 connection on the auto-launcher. This was done as tube 6 was having connectivity issues. After cleaning the connection with electrical spray incorrect readings were intermittently recorded on the 14th and the 17th. Otherwise there were no other significant issues with the XBT system aside from the occasional faulty probe and the MK21 shutting down frequently.

One other non-significant problem arose when deploying the ARGO floats, as some of the springs in the release mechanism were rusty. An unusually long amount of time would pass before some of the releases would fail and the float would be deployed. This was the case even in the correct procedure of deployment, where the float is not flat but is rather at an angle to give maximum exposure to the water release. Furthermore float number 7060 was not deployed due to a faulty inflating bladder.

- f) **Recommendations:** A solution to the MK21 failing might be to use a different backup power source. Thoroughly taping up the CAT5 connection with electrical tape seemed to solve the faulty readings and perhaps replacing some of the rusty springs on the float releases.
- g) **Other narrative:** The Captain, officers and crew of the Vilnius were exceptionally hospitable whilst I was aboard. As always it is a pleasure to sail with the crew. Furthermore the assistance from personal at NOAA and WHOI is always appreciated whilst onboard.
- h) **Ship contact:** Captain Mario Gaylan
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