

19980830H1-AXBT

E.4 Boundary-Layer Scientist (On-Board)

The on-board boundary-layer scientist (BLS) is responsible for data collection from AXBT's, AXCP's, BUOY's, and sea surface temperature radiometers (if these systems are used on the mission). Detailed calibration and instrument operation procedures are contained in the air-sea interaction (ASI) manual supplied to each operator. General supplementary procedures follow. (Check off and initial.)

E.4.1 Preflight

- ☒ 1. Determine the status of equipment and report results to the on-board lead project scientist (LPS).
- ☒ 2. Confirm mission and pattern selection from the on-board LPS.
- ☒ 3. Select the mode of operation for instruments after consultation with the HRD/BLS and the on-board LPS.
- ☒ 4. Complete appropriate preflight check lists as specified in the ASI manual and as directed from the on-board LPS.

E.4.2 In-Flight

- ☒ 1. Operate the instruments as specified in the ASI manual and as directed by the on-board LPS.

E.4.3 Postflight

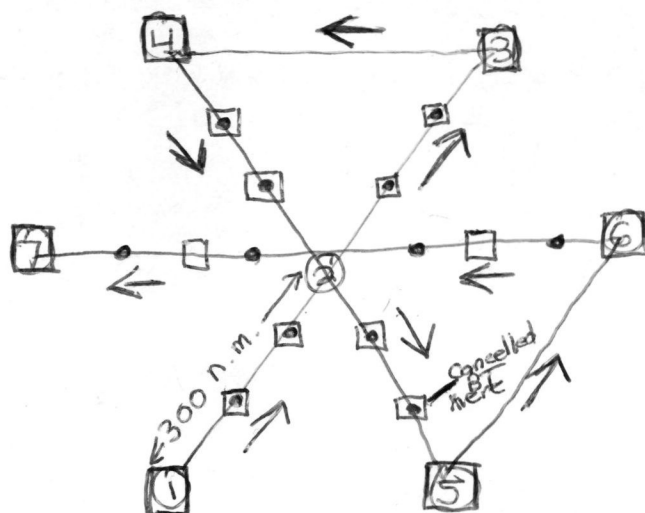
- ☒ 1. Complete summary check list forms and all other appropriate check list forms.
- ☐ 2. Brief the on-board LPS on equipment status and turn in completed check lists to the LPS.
- ☐ 3. Debrief as necessary at the appropriate operations center (FGOC or MGOC).
- ☐ 4. Determine the status of future missions and notify appropriate operations center (FGOC or MGOC) as to where you can be contacted.

AXBT/AXCP Check Sheet Summary

Flight 980830H

	Number
(1) Probes dropped	<u>15</u>
(2) Failures	<u>2</u>
(3) Failures with no signal	<u>2</u>
(4) Failures with sea surface temperature, but terminated above thermocline	<u>0</u>
(5) Probes that terminated above 250 m, but below thermocline	<u>0</u>
(6) Probes used by channel number	<u>5</u>
..... CH12	<u>6</u>
..... CH14	<u>4</u>
..... CH16	<u>4</u>
..... CH_	<u> </u>

NOTES



- Dropsondes
- AXBTs
- Dropsondes + AXBTs to be released at all turn points except in the eye - ② - only dropsondes in eye

~~7 planned AXBT launches~~

Form E-4
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AXBT and AXCP Check Sheet

Flight Number 980830H
Take-off Time 183757
Storm DANIELLE

AXBT/AXCP Contract Number _____

Landing Time _____

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$\Delta t \times 1.5$

AXCP/ AXBT#/ Type	Channel Number	Launch Time Est Number	Splash Predicted Drop Time (HHMMSS)	M.L. Base Actual Drop Time (HHMMSS)	Launch Predicted Lat. Deg. Min.	Launch Predicted Long. Deg. Min.	Actual Lat. Deg. Min.	Actual Long. Deg. Min.	Surface Temp. AXBT IRT	MLD (m)	Comments	Dropsonde Log #
1	12	1957	200200	200235	23 31	76 44			30.4	52.5	Noise present before getting to mixed layer depth	Corresponds to Drop 2 - no
2	14	2018	202151	202222	24 54	75 54			29.5	46.5		Drop 2 - no some winds due to AVAP outage
3	16	2039	204319	204342	26 14	75 00			28.6	34.5	shallow mixed layer	Drop #4
4	14	213201	213504	213532	29 15	73 01			26.3	42.0	declines gradually under mixed layer	Drop #5
5	12	215413	215712	215740	30 42	72 02			28.3	42.0	sharp T gradient under M.L.	Drop #8
6	12	221623	221926	221948	32 09	71 11			28.4	33.0	shallow mixed layer - strong T gradient underneath	Drop #9
7	14	232535	232535	—	32 04	77 17			—	—	Failed	Drop #10
8	16	235436	235706	235731	30 12	75 55			29.0	37.5		Drop #11
9	12	001021	001331	001345	29 13	75 12			26.4	21.0	shallow mixed layer followed by some noise then gentle T-fall	Drop #12
10	16	005513	005818	005838	26 25	73 15			27.7	30.0	shallow mixed layer	Drop #13
11	12	013048	013330	013417	24 23	71 42			27.8	70.5	long steady mixed layer	Drop #14
12	14	022536	022840	022907	28 14	69 39			28.5	40.5	noise spike near bottom of mixed layer	Drop #16
13	16	024647	024952	025019	28 15	71 31			27.5	40.5	noise spike near bottom of mixed layer	Drop #17

*M = Magnavox; H = Hermes; S = Sippican.

— Approximate Launch Times For #1, 2, +3

AXCP Log

Flight Number _____

Storm Name _____

Storm Direction/Speed _____

Take-off Time _____

Landing Time _____

[illegible][illegible]

Landing Time _____

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Dropsonde
Log #

Between
Drops 42+2
until 005647

Drop #24
no sande wind

*M = Magnavox; H = Hermes; S = Sippican.
- Approximate Launch Time For #14

AXCP Log

Flight Number _____

Storm Name _____

Storm Direction/Speed _____

Take-off Time _____

Landing Time _____

[illegible][illegible]