

19990913JL-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 _____

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

NOTES

Time deep }
Time splash }
Time splash }
Time splash }
Time MLD *1.5

- Drop Time
 Splash Time / T
 MLD Time *1.5

AXBT and AXCP Check Sheet

Flight Number NOAA 43
 Take-off Time 13 Sep 1999
 Storm Hurr Floyd.

AXBT/AXCP Contract Number _____
 Landing Time _____

lat/long in decimals

lat/long in deg/min

AXCP/ AXBT#/ Type	Channel Number	Lot Number	Predicted Drop Time (HHMMSS)	Actual Drop Time (HHMMSS)	Predicted Lat. Deg. Min.	Predicted Long. Deg. Min.	Actual Lat. Deg. Min.	Actual Long. Deg. Min.	Surface Temp. AXBT IRT	MLD (m)	Comments
AXBT	1		19:15	19:57:07	Splash Time		25 23	73 23	28.8		Data system failure - no splash readings - BAD
	283 Good		difference $\phi = 2^{\circ}C$	20:23:18	20 26	00	25 56	74 06	28.8	30s	30 secs through ML
	183 Good		difference $\phi = 1^{\circ}C$	20:34:01	20 36	40	24 06	74 44	28.7	33s	33 secs through ML
				21:21:47			24 28	72 88			No Readings
	183 Good		difference $\phi = 1^{\circ}C$	21:30:00	21 32	53	24 27	72 30	26.3	22s	22s through ML
	183				22 22	22			26.1		Readings allowed the place.
	283 Good			22:26:01	22 28	38	24 79	73 09	26.8	29s	A couple of cold blips in the ML
	283 Good		difference $\phi = 2^{\circ}C$	0:04:36	00 07	25	23 79	73 06	28.0	27s	
	183 Good		difference $\phi = 1^{\circ}C$	0:11:42	00 14	27	24 07	73 50	27.2	27s	also a brief cold layer at 14s
	283 Good		difference $\phi = 2^{\circ}C$	0:37:13	00 39	49	25 13	74 57	28.6	38s	
										14 41	
										14 54	
										14 59	

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

