

1998082341-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 980823H

	Number
(1) Probes dropped	<u>8</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>2</u>
(5) Probes that terminated above 250 m, but below thermocline	<u>0</u>
(6) Probes used by channel number	
..... CH12	_____
..... CH14	_____
..... CH16	_____
..... CH_____	_____

NOTES

2/8 AXBTs were full failures. 2 of the remaining 6 reported SSTs and temps just below the surface but signal failure occurred before the thermocline. For these 2 AXBTs no MLDs could be determined. For BT1 we saw a much deeper ML (~90m) suggesting mixing has been occurring. This is consistent w/ storm ~ stationary track ~ since 3Z 8/23. In addition SSTs have sig cooled (ie ~29.3 SST observed in region 8/20-8/21). Coldest SSTs were ESE of storm center (26.1-26.5C over 8/21-22). Coldest SSTs were ESE of storm center (26.1-26.5C over 8/21-22).

AXBT and AXCP Check Sheet

Flight Number 980823H AXBT/AXCP Contract Number
 Take-off Time 17:38:43 Landing Time
 Storm Donnae Asacat 2/3 GPSTa ✓ ✓

AXCP/ AXBT#/ Type	AXBT Channel Number	Flight 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
S	1	X50ad	20:10:40	20:11:40	T _g	-	24 25	71 28	26.1	90	SE eye
	2	-	Dead	-			24 50	71 56	-	-	eye Dead
	3	-	Dead	-			25 11	72 19	-	-	NW eye Dead
	4	✓11EX	20:47:36	20:47:15	T _g	26.45	25 24	56 71	25 27.0	32	BT-Swept GPS-ER
	5	✓13	20:55:58	-	T _g	25.51	2.025	17 71	07 27.5	-	NW eye No MLD-Sighted
	6	✓7	21:16:08	21:16:44	T _g	26.52	1.024	46 71	46 27.5	54	South eye
	7	✓9	21:24:30	21:25:00	T _g	25.48	1.023	51 71	44 26.5	45	S of center
	8	between 23-24 recorded	21:51:49	-	T _g	25.49	24 44	72 01	26.2	-	West leg, East Eye
					T _g	26.74					NOMUS N. 1/2 eye
					T _g	25.07	1.1				(nother side crapped out)
					T _g	25.07	1.1				

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

AXCP Log

Flight Number _____

Storm Name _____

Storm Direction/Speed _____

Take-off Time _____

Landing Time _____

[illegible][illegible]