HALE-ALOHA 4B: Chief Scientist Report

Chief Scientist: T. HOULIHAN

HALE ALOHA 4b
Chief Scientist's Cruise Report
R/V Moana Wave
5-7 November 1998

Departed: 5 November 1998 at 2015 (HST)
Returned: 7 November 1998 at 0800 (HST)
Vessel: R/V Moana Wave
Operator: University of Hawaii
Master of the Vessel: Captain John Stahl
Chief Scientist: Terrence Houlihan

The cruise to recover the fourth deployment of the deep ocean mooring, HALE ALOHA, departed from Aloha Tower at 2015 on 5 November 1998. The R/V Moana Wave had been moored at Aloha Tower for the afternoon in conjunction with the UNOLS meeting being held in Honolulu. Both the Wave and the UH ship, Ka'imikai-o-Kanaloa, were made available for tours to the ship operators from the various UNOLS institutions. This cruise also was scheduled to recover a bottom moored sediment trap array and collect underway trace metal samples.

At 2120 a bathythermograph was deployed off the port side for underway collection of uncontaminated water to be used by Drs. Ed Boyle and Jingfeng Wu in trace metal analysis. Water was collected throughout the transit from Honolulu to the HALE ALOHA and return. We arrived on station at 0512 on 6 November and immediately recovered the underway sampling fish. We did encounter some problems with a Benthos deck box but after switching to the backup unit an acoustic release was enabled and commanded to release. The release was confirmed at 0626 and the hardhats were spotted on the surface at 0716. At 0738 the first floats were on board and recovery of the mooring line began. At 1143 the surface buoy was on board for an elapsed recovery time of 4:05. The recovery and subsequent deployment were facilitated by the use of a newly acquired SeaMac mooring winch. The line and wire were not to be redeployed so the polypropylene was spooled into three wire baskets for disposal at the Marine Center. The rest of the line and wire was spooled comfortably onto the winch. All equipment was recovered in good shape with no obvious failures in any instrumentation.

We proceeded to the triangulation locations to reaffirm location of the bottom moored sediment traps. An acoustic release was enable and slant ranges were acquired from three locations to calculate the location of the anchor. The triangulation required :35 and was completed at 1532 where we proceeded to the trap location at 22 51.44'N and 157 55.67'W. The command was sent to release the traps and confirmation was received at 1547. The traps were calculated to be ascending at 100m/min. The floats were grappled at 1703 and the last of the array was on deck at 1905. Both traps were recovered in good shape although

the next deployment will require replacement of one cone baffle, bridles on both traps and the hardhat chain.

After the back deck was secured we deployed the underway water sampler and were underway for Snug harbor at full speed by 2000. The fish was recovered at 0635 and we proceeded to Pier 45.

Cruise Participants:

1.	T. Houlihan	UH
2.	D. Hebel	UH
3.	D. Sadler	UH
4.	L. Fujieki	UH
5.	M. Valenciano	UH
6.	D. Wright	UH
7.	W. Hervig	STAG
8.	D. Gravett	STAG
9.	J. Wu	MIT
10.	E. Boyle	MIT
11.	J. Bartlett	OSU