

August 25, 2000

F/SWC2:CDW:JLB
CR9302-1.FAP

CRUISE REPORT

VESSEL: *Townsend Cromwell*, Cruise TC-93-02 (TC-180)

CRUISE PERIOD: February 24-March 2, 1993

AREA OF OPERATION: Waters around Oahu and Molokai (Fig. 1)

TYPE OF OPERATION: Personnel from the Southwest Fisheries Science Center (SWFSC) Honolulu Laboratory (HL) conducted bathymetric mapping and systematic sediment sampling in the waters of Oahu and Molokai.

ITINERARY:

- 24 February - Start of cruise. On board Keith Bigelow, Matthew McGranaghan, Frank Parrish, and Michael Seki. Depart Snug Harbor 1100, transit to leeward Oahu to test CTDs and the midwater Cobb trawl.
- 25 February - Transported Bigelow and Seki ashore at Snug Harbor (0800). Ship then transited to Kaneohe Bay and commenced shipeck bottom grab survey.
- 26 February - Finished Kaneohe bottom sampling, deployed video drop camera and completed bathymetric survey. In evening hours conducted bottom grab survey in Kailua Bay.
- 27 February - Deployed video drop camera and completed bathymetric survey of Kailua Bay. At 1500 both Parrish and McGranaghan were transported ashore at Kailua.
- 28 February - Traveled to north Oahu and conducted bathymetric survey.
- 1-2 March - Traveled to north and south Molokai and conducted bathymetric surveys.

Returned to Snug Harbor 1130. End of cruise.

MISSIONS AND RESULTS:

- A. Test midwater Cobb trawl and both the ships and the laboratory's CTD.
1. The midwater Cobb trawl demonstrated acceptable performance in three tows, the first of which was done with the cod end open.
 2. A single cast was made with both HL's and the ship's CTD, and each appeared to function.
- B. Sediment survey of Windward Oahu sites using a shipeck bottom grab.

A total of 62 bottom grabs were collected on seven transect lines in Kaneohe Bay and three lines in Kailua Bay. Each transect line ran perpendicular to the bottom contours, and samples were taken at depths of 150, 250, 350 ft.

- C. Video drop camera was conducted on five of the seven transects in Kaneohe and all three of the transects in Kailua Bay. Depths of 160-200 were targeted for survey with three camera deployments for each transect line sampled.
- D. Bathymetric survey of each of the survey sites was conducted using the ships fathometer and GPS receiver, each recorded by the onboard scientific computing system.
- E. General observations and miscellaneous activities.

Bird flock, fish school, and marine mammal sightings were recorded by the ship's officers and crew during daylight hours when possible.

Standard weather observations were made at 0000, 0600, 1200 and 1800 (G.m.t.) by the ship's officers and crew.

SCIENTIFIC PERSONNEL:

Frank A. Parrish, Chief Scientist, National Marine Fisheries Service (NMFS), Southwest Fisheries Science Center (SWFSC), Honolulu Laboratory (HL).

Keith A. Bigelow, Fishery Biologist, NMFS, SWFSC, HL.

Mathew McGranaghan, Cooperative Scientist, University of Hawaii

Michael P. Seki, Fishery Biologist, NMFS, SWFSC, HL.

Submitted by: _____
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Approved by: _____
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Attachment