

# NOAA Pacific Islands Fisheries Science Center

## Small Boat Mission Report

**Mission Number:** SB-13-11

**Operator-in-Charge:** Jeremy Taylor

**Chief Scientist:** Frances Lichowski

**Small Boat ID/Type:** R/V *AHI*, Small Boat Research Vessel F2505

**Mission Title:** Nearshore bathymetry gap filling around the Island of Oahu, Hawaii

**Mission Area:** Island of Oahu, between Pearl Harbor and Kahana Bay

**Mission Dates:** June 17 – July 3, 2013

### ***1. Mission Plan***

**Cruise Objective:** The NOAA Pacific Islands Fisheries Science Center's Coral Reef Ecosystem Division Mapping Program conducted 13 days of acoustic benthic habitat mapping operations aboard the R/V *AHI* around the island of Oahu, Hawaii. Survey operations extended from Pearl Harbor to the near vicinity of Kahana Bay. Daily survey locations were determined by weather conditions. Operations were based out of Pearl Harbor and Haleiwa Harbor from June 17 to July 3, 2013.

**Cruise Operations:** The Mapping Team spent 11 days conducting multibeam surveys in water depths of 10-200 meters to fill gaps in existing bathymetry data sets. The goal of completing the multibeam bathymetry data collection around the island of Oahu was accomplished.

### ***2. Schedule***

#### **Pre-Mission Schedule:**

**3 June** Personnel prepared and transported R/V *AHI* to Keehi Lagoon and conducted one day of sea trials.

#### **Mission Schedule:**

**17 June** 0730 CRED personnel (Taylor/Lichowski/O'Brien) mobilize and launch boat at Ford Island boat ramp.  
0800 Start transit towards first survey location near Koolina Marina. Conduct a CTD cast and began acoustic survey activities.  
1400 Due to mechanical problems transit to closest harbor.  
1530 Arrival at Koolina Marina.

- 19 June** 0900 CRED personnel (Taylor/Lichowski/O'Brien) met up with small boat mechanic at Koolina Marina for inspection, repair and sea trial.  
1200 CRED personnel (Taylor/O'Brien) depart Koolina Marina.  
1230 Conduct a CTD cast and begin acoustic survey activities (gap filling) along windward side of Oahu while transiting towards Haleiwa Harbor.  
1600 Completed acoustic surveys for the day and began transit.  
1700 Arrival Haleiwa Harbor.
- 20 June** 0800 CRED personnel (Taylor/Lichowski) departed Haleiwa Harbor, Hawaii.  
0830 Conducted a CTD cast and began acoustic survey activities between Haleiwa and Ka'ena Point.  
1600 Completed acoustic surveys for the day and began transit.  
1615 Returned back to harbor, followed by securing the data, cleaning up and preparing the vessel for the next day and data post processing.
- 21 June** Mapping personnel performed data quality control and troubleshooting.
- 24 June/  
25 June** 0800 CRED personnel (Taylor/Lichowski) departed Haleiwa Harbor, Hawaii.  
830 Conducted a CTD cast and began acoustic survey activities between Haleiwa and Sunset Beach.  
1600 Completed acoustic surveys for the day and began transit.  
1615 Returned back to harbor, followed by securing the data, cleaning up and preparing the vessel for the next day and data post processing.
- 26 June** 0800 CRED personnel (O'Brien/Rooney/Knighton) departed Haleiwa Harbor, Hawaii.  
0830 Mapping personnel Taylor and Lichowski meet the boat and join for transducer and hull inspection at Waimea Bay.  
0930 Conducted a CTD cast and began acoustic survey activities between Waimea and Ka'ena Point.  
1600 Completed acoustic surveys for the day and began transit.  
1615 Returned back to harbor, followed by securing the data, cleaning up and preparing the vessel for the next day and data post processing.
- 27 June** 0800 CRED personnel (Rooney/Knighton) departed Haleiwa Harbor, Hawaii.  
0830 Conducted a CTD cast and began acoustic survey activities between Haleiwa and Ka'ena Point.  
1600 Completed acoustic surveys for the day and began transit.  
1615 Returned back to harbor, followed by securing the data, cleaning up and preparing the vessel for the next day and data post processing.
- 28 June** 0800 CRED personnel (Taylor/Lichowski) departed Haleiwa Harbor, Hawaii.  
0830 Conducted a CTD cast and began acoustic survey activities between Haleiwa and Laie Point.  
1600 Completed acoustic surveys for the day and began transit.  
1615 Returned back to harbor, followed by securing the data, cleaning up and preparing the vessel for the next day and data post processing.

**01 July** 0800 CRED personnel (Taylor/Lichowski) departed Haleiwa Harbor, Hawaii.  
 0830 Conducted a CTD cast and began acoustic survey activities between Haleiwa and Ka’ena Point.  
 1600 Completed acoustic surveys for the day and began transit.  
 1615 Returned back to harbor, followed by securing the data, cleaning up and preparing the vessel for the next day and data post processing.

**01 July** 0800 CRED personnel (Taylor/Lichowski) departed Haleiwa Harbor, Hawaii.  
 0830 Conducted a CTD cast and began acoustic survey activities between Haleiwa and vicinity of Pearl Harbor.  
 1500 Completed acoustic surveys for the day and began transit.  
 1600 Returned back to Ford Island small boat pier, followed by securing the data, cleaning up and preparing the vessel for the next day recovery.

**2 July/3 July** Recovered R/V AHI onto trailer. Demobilized, cleaned and stored all equipment. Mission completed.

**3. Field Party**

<b>Name</b>	<b>Role</b>	<b>Organization</b>
Frances Lichowski	Chief Scientist/2 <sup>nd</sup> OIC	JIMAR
Jeremy Taylor	OIC	JIMAR
Kevin O’ Brien	Vessel Operator	JIMAR
John Rooney	Vessel Operator	JIMAR
Faith Knighton	Vessel Operator	NOAA

**4. Results**

The following data were collected during these surveys:

- Filling in multibeam bathymetry data gaps in previously collected bathymetry data
- All bathymetry data were contributed to Main Hawaiian Islands synthesis

## 5. Attachments

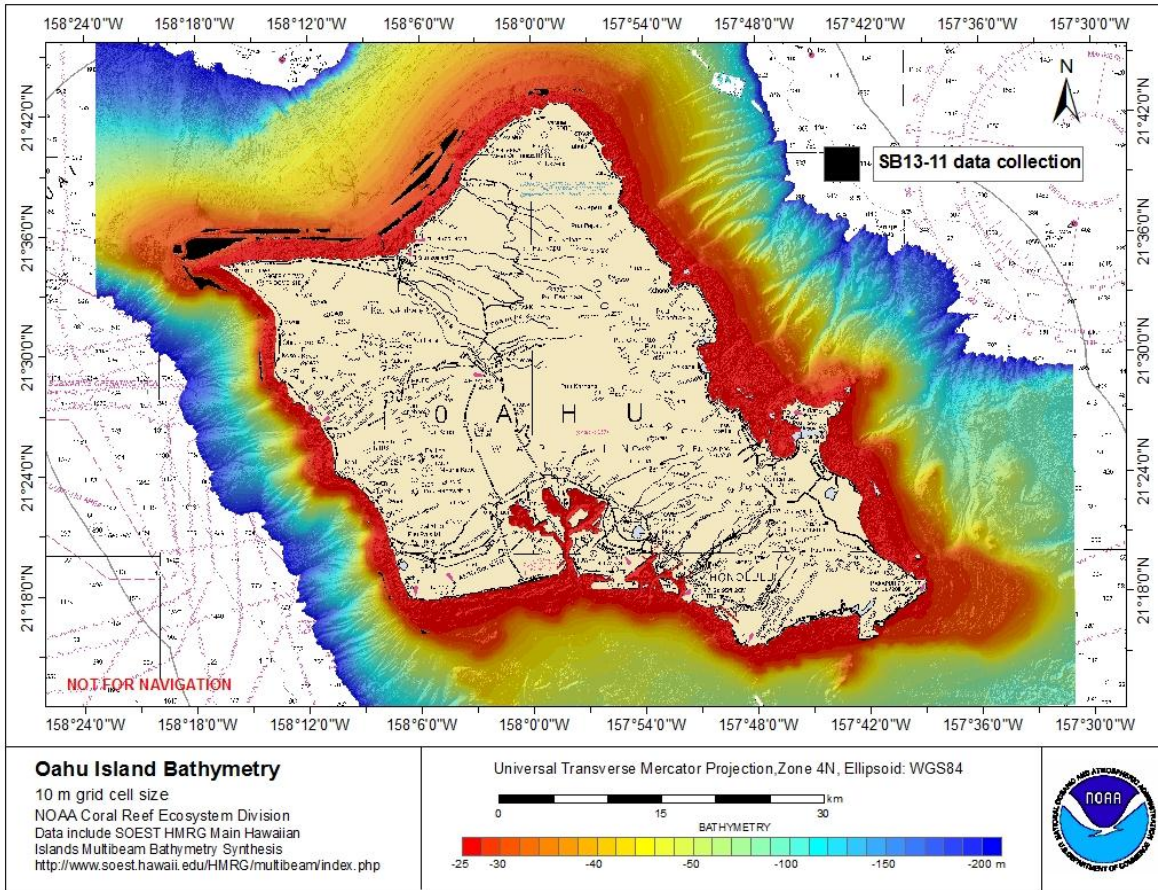


Figure 1.--Locations of multibeam survey sites

**6. Approvals**

---

Frances Lichowski  
Chief Scientist  
Pacific Islands Fisheries Science Center

---

Date

---

Samuel G. Pooley, Ph.D.  
Science Director  
Pacific Islands Fisheries Science Center

---

Date