

DESCRIPTIVE REPORT MEMO

November 30, 2018

MEMORANDUM FOR: Pacific Hydrographic Branch

FROM: Colin Stewart
Physical Scientist, Pacific Hydrographic Branch

SUBJECT: Submission of Survey W00374

There were two main objectives associated with this project. 1. Collect high resolution bathymetry data for the purpose of nautical charting in depths up to 450m with the Simrad ME70. The Remus 600 AUV supplemented survey operations in Priority area 1. The current charted soundings are of 1939 vintage. 2. Acquire water column data with the EK60 to model abundance and distribution of fishes associated with various seafloor structures. Place based fisheries and coastal zone managers depend on fine scale bathymetry and habitat maps for an array of critical decisions including: navigational safety, disaster response, endangered species and fisheries management, conservation, research, energy development, and marine planning. Yet within NOAA's Channel Islands National Marine Sanctuary (CINMS) almost 50% of the seafloor remains unmapped at an appropriate resolution with the majority of available data being characterized from single beam and lead line soundings from the 1930s.

Preliminary products (depth surfaces, backscatter mosaics) were created by the field unit and provided for submission to Pacific Hydrographic Branch. Final products for submission to MCD were created at the Pacific Hydrographic Branch during the External Source Data Review (ESDR) for compilation to the nautical chart.

Soundings were reduced to Mean Lower Low Water (MLLW) using observed tides from station 9411340 and tide zones provided by CO-OPS. TCARI tide file utilized - SH1706.tc.

No Data Acquisition and Processing Report is available for this survey

There were no DTONs created for this survey.

NOAA Ship Bell Shimada acquired the data outlined in this report.

Data is the best available in the area, and should be used to update the chart

The survey is partially adequate to supersede previous data. This survey will be used to update NOAA navigational products where possible. Survey data should be archived at NCEI and the DR memo forwarded to HSD.

Metadata for Survey W00374	
Project	OSD-PHB-17
Survey	W00374
State	California
Locality	Channel Islands National Marine Sanctuary
Sub-Locality	Santa Rosa and Santa Cruz Islands
Scale of Survey	1:40000
Sonars Used	Kongsberg Maritime ME70 (MBES) Kongsberg Maritime EM 3002 (MBES)
Horizontal Datum	North American Datum 1983
Vertical Datum	Mean Lower Low Water
Vertical Datum Correction	TCARI
Projection	Projected UTM 11N
Field Unit	NOAA Ship BELL M. SHIMADA
Survey Dates	04/27/2017 - 05/11/2017
Chief of Party	Chris Caldow, Channel Islands National Marine Sanctuary
Submission Date	11/30/2018