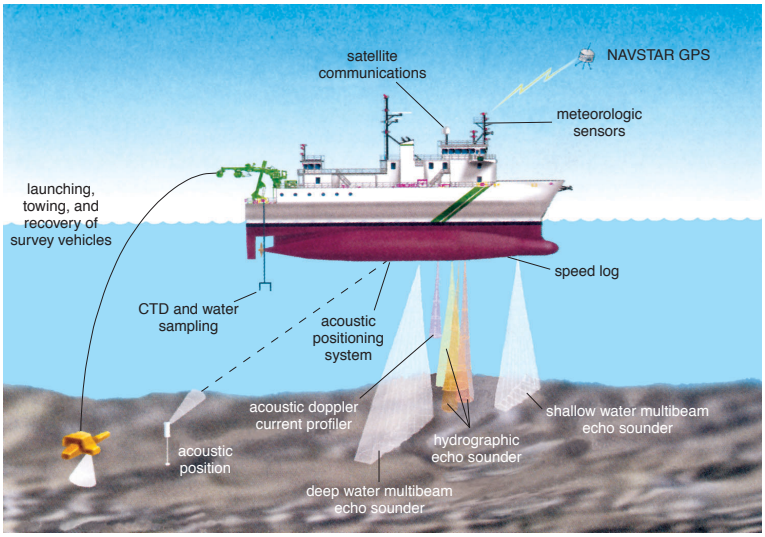
R/V Kilo Moana

R/V KILO MOANA is the newest US oceanographic research vessel. The small waterplane area, twin hull (SWATH) form is designed to provide a comfortable, stable platform allowing general purpose oceanographic research in coastal and deep ocean areas, even in high sea conditions. She has the speed (15 kts max; 12 kts survey), endurance (50 days), mission payload (100 LT) and range (10,000 nm) to operate throughout the Pacific and indeed globally. Dynamic positioning (with twin screws and bow-thruster), (differential) GPS, an inertial reference unit, and an integrated bridge and power control system, permit accurate surveying and station keeping. Accommodations for 18 crew and 30 scientists complement the generous lab spaces (~3,000 sq ft) outfitted to support oceanographic and meteorological research.

R/V KILO MOANA is equipped with an extensive suite of sonar systems (including Simrad EM120 and EM1002 multibeam bathymetry, Sontek 125kHz ADCP, and 4, 12, 38 and 200 kHz echosounders) plus a gravimeter, magnetometer, fluorometer, thermosalinograph and CTD system. There is a ship-wide computer and video/data-sharing network. Cranes, winches and a movable stern frame (providing a reach of 12 ft beyond the transom) allow equipment to be launched, towed and recovered over the stern and side from the 2,200 sq ft aft working deck. On the 01 level there is an additional 2,000 sq ft of working deck located forward, as well as several (20 ft x 8 ft) van locations midship. A radiosotope van is available. Further information on the ship's characteristics and systems is described at http://soest.hawaii.edu/KiloMoana.



BUILT: 2002

DESIGN: SWATH
(Small Waterplane Area Twin Hull)

LENGTH: LOA 186'
Strut Length: 172'

BEAM: 88'

DRAFT: 25' (Max); 21' (Min)

GROSS TONNAGE: 2500 LT

COMPLEMENT:
Crew: 20
Scientific Personnel: 28

SPEED:
Cruising & Survey: 12 kt
Full: 15 kt

OPERABILITY: Sea State 6

ENDURANCE: 50 days

RANGE: 10,000NM @ 12 kt

FUEL CAPACITY: 130,000 gal

OPERATED BY: School of Ocean and Earth Science and Technology, University of Hawaii

OWNERSHIP: U.S. Navy

LABORATORIES:

Hydrographic	290 sq ft
Chemical	290 sq ft
Wet	320 sq ft
I-Met	270 sq ft
General Lab #1	170 sq ft
General Lab #2	560 sq ft
Computer	560 sq ft
Staging Bay	370 sq ft
Science Office	90 sq ft
ET Shop	110 sq ft
TOTAL	3,030 sq ft

CONFERENCE ROOM: 270 sq ft

LIBRARY: 260 sq ft

FULLY AIR CONDITIONED

INCINERATOR: Yes

BOW THRUSTER: Elliott White Gill Model 40
Located in starboard hull

MAIN PROPULSION: Diesel electric
(4) 910 kW diesel generators driven by Caterpillar 3508B SCAC diesel engines
(2) 1.5 MW Westinghouse (Class 3) DC motors fed by 12-pulse SCRs and phase shifting transformers

PROPELLERS: Twin, fixed pitch, 5 blade

DYNAMIC POSITIONING & SHIP CONTROL:
EDI Power Management

EMERGENCY GENERATOR: 190 kW
Caterpillar 1406

CERTIFICATION:

ABS: A1 Circle E, AMS, ACCU UWLD
(Underwater inspection in lieu of dry docking.)
Unrestricted ocean service, Ice Class DO

USCG: Oceanographic Research Vessel
(Sub Chapter U)

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university of hawai'i

School of Ocean & Earth
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ONR