# Specifications

Ronald H. Brown Specifications (OMAO, PDF, 203.38 KB)

#### **Design Specifications**

DESIGNER	Halter Marine			
BUILDER	Halter Marine, Inc., Moss Point, MS			
LAUNCHED	May 30, 1996			
DELIVERED	April 18, 1997			
COMMISSIONED	July 19, 1997			
LENGTH	274 ft.			
BREADTH	52.5 ft.			
DRAFT	19 ft.			
DEPTH TO MAIN DECK	26.5 ft.			
HULL DESCRIPTION	Welded steel/ice strengthened			
DISPLACEMENT	3250 tons			

#### Speed & Endurance

EMERGENCY SPEED	15 knots
CRUISING SPEED	11 knots

You are here: http://www.omao.noaa.gov/learn/marine-operations/ships/ronald-h-brown/about/specifications

Reviewed: July 17, 2017. Contact us with page issues.

<sup>\*</sup>ac: "Access controlled" content.

RANGE	11,300 nm
ENDURANCE	60 days
ENDURANCE CONSTRAINT	Food

#### **Maximum Complement**

COMMISSIONED OFFICERS/MATES	6
ENGINEERS, LICENSED	4
ENGINEER, UNLICENSED	4
DECK	8
SURVEY	2
STEWARDS	4
ELECTRONIC TECHNICIANS	1
USPHS MEDICAL OFFICER	1
TOTAL CREW	30
SCIENTISTS	30

#### Berthing

SINGLE 9 STATEROOMS
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DOUBLE STATEROOMS	24
THREE-PERSON STATEROOM	1
TOTAL BERTHS	60

#### **Food Service Seating Capacity**

MESS ROOM	32	
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#### Ship's Navigational Equipment

RADARS (X AND S BAND)	2 Furuno FAR 21x7
GPS AND DGPS	2 Furuno GP-150 & 2 Trimble SPS 351
GYRO COMPASS	Teledyne Meridian Standard
DEEPWATER AND SHALLOW NAVIGATIONAL ECHOSOUNDERS	Kongsberg EM122, Bathy 2010, CHIRP 3260 / Furuno FE-700
ECDIS	TRANSAS (Bridge, Aft Bridge, CO Cabin)

## Scientists' Navigational Equipment

GPS AND DGPS	Furuno GP-150 / Applanix POS MV / Trimble SPS 351
GYRO COMPASS	Teledyne Meridian Standard
DEEPWATER AND SHALLOW NAVIGATIONAL	Kongsberg EM122, Bathy 2010, CHIRP 3260, Furuno FE-700

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<b>ECHOSOUNDERS</b>	
ECDIS	TRANSAS (Bridge)
CHARTING PROGRAM WITH SHIP'S POSITION	OpenCPN with NEMA String Broadcast Through Network

## Laboratory Spaces and Other Scientific Spaces

ТҮРЕ	LOCATION	FT. <sup>2</sup>	DESCRIPTION
Computer Lab	Main Deck Port Side	(610)	Kongsberg EM122 / ADCP / SyQwest Bathy 2010 / Knudsen CHIRP 3260 / CTD Control Console
Bio Lab	Main Deck Port Side	330	Separate air conditioning and ventilation system / Fume hood / Seawater Access
Main Lab	Main Deck Starboard Side	1745	2 Large Sinks / Seawater Access / Portable Lab Benches
Hydro Lab	Main Deck Port Side	693	PCO2 System / Temperature controlled Autosal room /Large Sink / TSG
Wet Lab	Main Deck Starboard Side	230	XBT Station / Fume Hood / Sink / Seawater

			Access
Staging Bay	Main Deck	(330)	18' Clearance / Roll down doors to protect against weather
Scientific Freezer	Main Deck Port Side	63	Minimum temperature is -10 F
Scientific Refrigerator	Main Deck Port Side	63	Minimum temperature is 38 F
Van/Shipping Container (provide in advance a draft van deck placement footprint with approximate weights)	4 x O2 deck forward, 4 x aft main deck, 1 x starboard O2 deck		Support 9 x 20' ISO mobile container units
Store Room	Main Deck Forward	358	3 Tiered Shelving for storage

# Scientific Data Collection Systems and Supportable Operations

ACOUSTIC CURRENT DOPPLER PROFILIER (ADCP)	RD Instruments 75 kHz Ocean Surveyor with UHDAS software
SCIENTIFIC DIVER SUPPORT	Air Compressor onboard and 4 NOAA working divers

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THERMOSALINOGRAPH	SBE21 at intake, SBE45 in hydro lab
SCIENTIFIC COMPUTER SYSTEM EQUIPPED	NOAA SCS v.4.9.0
MULTIBEAM EQUIPPED FOR HYDROGRAPHIC SURVEYS	Kongsberg EM122 with SIS software
EXPENDABLE BATHYTHERMOGRAPHS (XBT) CAPABLE	Sippican MK21 software and probe launcher. Program must provide probes.
CONDUCTIVITY, TEMP., DEPTH (CTD) WITH WATER SAMPLES	Seabird SBE 9+ CTD, 11+ deck unit and SBE32 water sampler
ATMOSPHERIC CO2 DATA COLLECTION	pCO2 system operated by survey technicians. Owned by AOML
FLUOROMETER	Installed inline Turner, data output available in SCS

#### **Boats**

ТҰРЕ	HP	LENGTH	MAX. PERSONS	COMMENTS
Rescue Boat (SOLAS Approved)	230	22	9	
Rigid Hull Inflatable Boat (RHIB)	100	17	4	

#### **Additional Capabilities**

DYNAMIC POSITIONING CAPABLE	Kongsberg DP system, K-POS DP11
RESON 70 SOUND VELOCITY PROFILER	2 sensors located amidships. Both sensors feed SCS but only the starboard sensor feeds the Kongsberg EM 122
ACCESS TO CLEAN ELECTRICAL POWER	Clean electrical power available throughout the ship. Two motor generator sets installed
COMPRESSED AIR	120 PSI compressed air available throughout the ship and accessible from van slots
SALTWATER RINSE	Hose available on the main deck, starboard side for scientific use to rinse equipment & nets

## **Deck Equipment**

Winch – CTD (Hydro Boom)

QUANTITY	2
MANUFACTURER	Markey
MODEL	DESH-5
DRIVE	Electronically Controlled DC motor and brake
MAX. PULL	8100 lbs.

MAX. DEPTH	8000 m
DRUM CAPACITY	10,000m of .322" conductor cable
TYPE OF CABLE INSTALLED	.322" conductor cable
LENGTH OF CABLE ON THE DRUM	8000 m
LOCATION	02 Deck, Starboard, Amidships

#### Hydro Boom

QUANTITY	1
MANUFACTURER	Markey
MODEL	Shipboard Boom model 15000
SWL (LBS)	12000 lbs.
REACH OVER SIDE	12 ft.
LOCATION	02 Deck, Starboard

# Winch – Traction, Dual Drum route to A – Frame or Crane

QUANTITY	1
MANUFACTURER	Markey
MODEL	DUTW-11

DRIVE	Electronically Controlled DC motor and brake
MAX. PULL	8100 lbs.
MAX. DEPTH	15000 m
DRUM CAPACITY	10,000 m of .680" conductor cable; 15000 m of 9/16" wire rope
TYPE OF CABLE INSTALLED	.680" conductor cable; 9/16" wire rope
LENGTH OF DRUM CABLE	10,000 m / 15,000 m
LOCATION	Winch room, below deck

#### Crane, Telescopic Boom

QUANTITY	2
MANUFACTURER	North American
MODEL	MCT-165
BOOM LENGTH	65 ft.
LIFTING CAPACITY	42,000 lbs. at 10'
LOCATION	Main Deck Starboard, O1 Deck Port

## Crane, Portable, Foldable Boom

QUANTITY	1
MANUFACTURER	HIAB

MODEL	HIAB 180 SeaCrane
BOOM LENGTH	40 ft.
LIFTING CAPACITY	14,000 lbs. at 10'
LOCATION	Main Deck Port

#### A Frame

QUANTITY	1
CLEARANCE OVER THE SIDE	15 ft.
HORIZONTAL CLEARANCE	20 ft.
SAFE WORKING LOAD	21,200 lbs.
LOCATION	Fantail

#### Anchor - Bow

QUANTITY	2
ТҮРЕ	Stockless
WEIGHT	4850 lbs.
PORT ANCHOR CHAIN LENGTH	135 fathoms, 9 shots
STARBOARD ANCHOR CHAIN LENGTH	120 fathoms, 8 shots

#### **Boat Davit**

QUANTITY	MANUFACTURER	HOIST CAP.	LOCATION	B(
1	Miranda	5,375	Starboard O-2	R€ B¢

#### **Medical Facilities**

One medical treatment room containing two berths for patients. Emergency and first-aid equipment aboard, administered by designated vessel personnel. USPHS medical officer onboard.