

CONDITION & VALUATION SURVEY REPORT

65 Feet x 22 Feet x 8 Feet

**76 GRT / 61 NRT
Passenger Vessel**

ADVENTURE



PRINCIPAL:

**BALD HEAD TRANSPORTATION AUTHORITY
P.O. BOX 3069
BALD HEAD ISLAND, NORTH CAROLINA, 28461**

REGISTRY:

UNITED STATES OF AMERICA

USA Official No.:

916323

INSPECTION DATE:

November 14 & 17, 2018

REPORT DATE:

November 26, 2018

GENERAL PARTICULARS

CURRENT REGISTRY:	USA – OFFICIAL # 916323
CURRENT HOME PORT:	BALD HEAD ISLAND, NORTH CAROLINA
CURRENT CALL SIGN:	WCS-3443
CURRENT OWNERS:	BALD HEAD ISLAND TRANSPORTATION I CHANDLER BUILDING – P.O. BOX 3069 BALD HEAD ISLAND, NC 28461 U.S.A.
CURRENT OPERATORS:	SAME
I.M.O. No.:	N/A
PREVIOUS REGISTRY:	N/A
PREVIOUS HOME PORT:	N/A
MMSI #:	367195440
PREVIOUS NAMES:	N/A
BUILT BY:	BREAUX BROTHERS ENTERPRISES, INC. P.O. BOX 1100 5816 DASPIT RD. (HYW 86) LOREAUVILLE, LOUISIANA, 70552 U.S.A.
HULL NO.	122
DATE OF CONSTRUCTION:	1987
REGISTERED G.R.T.:	76
REGISTERED N.R.T.:	61
ITC-69 G.R.T.:	N/A
ITC-69 N.R.T.:	N/A
TYPE OF SERVICE:	PASSENGER – USCG SUB-CHAPTER ‘T’
SERVICE AREA:	ATLANTIC, INTRACOASTAL WATERWAY, NOT MORE THAN 1 MILE FROM SHORE
MAX. # OF PAX:	150
MAX # OF CREW:	4
L.O.A.:	64.80 FEET
L. (ART. 2 (8)):	N/A

MOULDED BREADTH:	22.00 FEET
MOULDED DEPTH:	8.00 FEET
MOULDED DRAFT (APPROX):	6.00 FEET
DEADWEIGHT:	UNK.
LIGHTSHIP:	UNK.
FUEL CAPACITY:	1700 Gallons – (Approx.)
FRESH WATER CAPACITY:	250 Gallons – (Approx.)
BLACK WATER CAPACITY:	300 Gallons – (Approx.)
MAIN ENGINES:	2 x CUMMINS – KTA 19A-M3 – 640 HP @ 1800 RPM
AUXILLIARIES:	2 x NORTHERN LIGHTS – 20 Kw
SERVICE SPEED:	17 Knots (Approx.)
CLASS SOCIETY:	N/A
PREVIOUS DRY-DOCK:	MARCH 14, 2017
RECENT DRY-DOCK:	NOVEMBER 2018
NEXT DRY-DOCK:	MARCH 31, 2021

CERTIFICATION:

- | | | |
|---|--------------------|---------------------|
| • USCG CERTIFICATE OF DOCUMENTATION (COD) | ISSUED: 04-18-2018 | EXPIRES: 05-31-2019 |
| • USCG CERTIFICATE OF INSPECTION (COI) | ISSUED: 04-27-2016 | EXPIRES: 04-27-2021 |
| • USCG STABILITY LETTER | ISSUED: 10-21-2011 | EXPIRES: N/A |
| • FCC RADIO STATION LICENSE | ISSUED: 06-14-2017 | EXPIRES: 08-20-2027 |

CONDITION OF INSPECTION:

THIS IS TO CERTIFY that the Passenger Vessel ADVENTURE was inspected by the undersigned Marine Inspector on November 14 & 17, 2018 for the purpose of determining the Condition & Valuation of the vessel. The vessel was in dry dock at Wilmington, North Carolina at the terminal facility of Wilmington Marine Center, 3410 River Road, Wilmington, North Carolina, 28412. The vessel has been hauled out of the water at this location to completed special survey by USCG.

The vessel was prepared for inspection with all hull compartments open, ventilated, and available for inspection.

This Condition and Valuation survey Report was requested by Bald Head Island Transportation Authority and is for their account.

GENERAL VESSEL DESCRIPTION:

The ADVENTURE is a small Passenger Ferry, built in 1987 by Breau Brothers Enterprises, Inc. of Lareauville, Louisiana. The vessel is inspected by the United States Coast Guard (USCG) under Sub-Chapter T rules and regulations. The vessel currently maintains a valid COI for operation with a maximum of 150 passengers plus 4 crew members. It is in dedicated ferry service between Southport, North Carolina and Bald Head Island, North Carolina.

The vessel is a 'shallow-vee' displacement hull with a single chine and is of all welded aluminum construction. The bow stem is curved with a bow sprit that extends forward with a P&S roller fairleader for launching and hoisting the anchor. The transom is curved. The vessel has a single skeg on centerline and is twin screw with twin spade rudders. The vessel has 2.50" diameter propeller shafts supported by water lubricated cutlass bearings that exit thru the hull stern tube and then are supported by another set of cutlass bearings at the "v-struts" just in front of the propellers. The propellers are ZF manufactured, fixed, 4-blade, NiBral, 32" diameter. The deck of the vessel has a no camber, or sheer. The vessel has a total of five (5) hull compartments which are accessed either via 18" diameter, flush water-tight manholes on the open deck, or by non-tight deck plates within the deckhouse.

The hull is longitudinally framed from the forepeak collision bulkhead to aft end. The fore peak is transversely framed. The vessel has four (4) continuous transverse water-tight bulkheads. Frame spacing is approximately 4'-0" throughout. The bottom hull shell plating is reported to be 3/8". Heavy (approximately 1/2") insert plates are fit in way of the P&S struts and rudder tubes on the bottom. The side shell has a full-length solid aluminum rounded fender at the main deck level and an aluminum rectangular fender about 2 feet below the main deck in way of the parallel body.

The vessel is fit with four (6) 4" diameter fabricated single bitts. There are two at the bow, two amidships, and two at the stern which are for mooring purposes. One 4" double bitt is fit on centerline forward which is used for securing the anchor. A single "delta" style anchor with a leading section of 1/2" chain and 3/4" soft nylon rope is provided at the bow which is directed overboard via a roller. A combination plate bulwark and pipe handrails are fit completely around the main deck.

There is a main deckhouse for passengers which is outfitted with upholstered bench-seating over an aluminum sub-structure and Formica-covered table-booths that can accommodate approximately 48 persons comfortably seated. The exterior of the deckhouse has additional painted aluminum bench seats fabricated around the perimeter. The deckhouse is accessible through P&S sliding weather-tight doors which provide access to the P&S passenger boarding stations and an aft weather-tight door that provides access to the stern deck and the men's and woman's restrooms. The restrooms are built into the aft end of the deck house. Each restroom is fit with a marine light fixture, a marine style toilet, a small (10" dia.) stainless steel wash basin with a single push-type faucet (cold water only), a bulkhead mounted soap and towel dispenser, a bulkhead mounted toilet paper holder, and a small plastic trash can.

Large fixed-pane windows are fit P&S and at the forward bulkhead of the deckhouse that provide great visibility. There are various Formica-covered wood cabinets and under bench cabinets for stowage of a total of 116 adult lifejackets and 20 child

lifejackets. The deckhouse is both air-conditioned and heated by a single central HVAC unit that is mounted on the bridge deck above. Standard fluorescent and emergency lighting is provided. Mega-phone style loud speakers are installed in all public areas to provide for announcements. The ceiling is covered with large sections of marine-style panels that are secured in position by aluminum battens and screws. The deck and interior sides are carpeted with indoor-outdoor style carpeting and trimmed around each window by aluminum pieces.

The pilot house sits atop the bridge deck and is accessed by an inclined ladder from the stern deck. The bridge deck is accessible to passengers and can accommodate a maximum total of 29 persons. Across the stern of the bridge deck is a fabricated aluminum box that serve as bench seating and lifejacket stowage. At this level there are a total of 36 adult lifejackets and 13 child lifejackets. The bridge deck is also completely surrounded by a combination of plate bulwark and pipe handrails.

The pilot house is outfitted with a complete steering console, a captain's chair, a chart table that serves also as the cabinet for the HVAC air handler, and a bench seat with under stowage. Fixed windows are fit on all sides of the pilot house which provide 360 degree visibility. Atop the pilot house is the main mast, radar foundations, the ship's horn, and all radio electronics antenna mountings. The interior of the pilothouse is sheathed with marine-style paneling and fastened with batten strips and screws. The deck is carpeted similar to the main deckhouse.

The below deck arrangements is as follows:

- A. The Fore Peak is a void space that is fit with a bilge suction and bilge alarm sensor. However, the space is also used to stow the anchor rope which feeds from the main deck.
- B. The Second compartment aft is a void tank but has been outfitted with a small air compressor and is also used for some storage of miscellaneous ship supplies. This compartment also has a bilge suction and a bilge alarm installed.
- C. The Third compartment aft is a void tank, but outfitted with 4 independent tanks. One large tank for fuel storage (approx. 1700 gallons), one tank for fresh water (approx. 250 gallons), and two sewage holding tanks (approx. 150 gallons each) from the toilets. Filling and discharging stations for these tanks are located on the main deck, port side and fit with valves and cam-lock style connections. There are no dedicated spill containments fitted. There is a small ¼ HP water pump and a small pre-charge tank installed to provide water pressure to the toilets and wash basins. There is a bilge suction and bilge alarm sensor installed.
- D. The Fourth compartment aft is the main engine room where all major operation equipment is located. The twin Cummins main engines are turbo-charged and heat exchanger cooled and fit with underwater exhausts. Each motor is fit with its own engine driven seawater cooling pump. The 2.50" tail shafts are fit with 'dripless style' seals. There are twin Northern-Lights 20 Kw generator sets in the engine room which feed a totally enclosed switchboard. A 50 amp shore-power connection is provided. Battery banks and a battery charger are also installed in the engine room. All motors are electric start. The engine room is fit with sea suctions and strainers for cooling water, a fuel distribution piping system, bilge suction manifold with an engine driven bilge pump, emergency bilge suction and bilge alarm sensor.
- E. The Fifth, and aftermost compartment is the steering compartment (Lazarette) where the rudder mechanism is fitted. The steering arrangement as supplied by 'ZF' and consists of twin hydraulic cylinders (one mounted at each tiller)

that are jointly connected via a jockey bar. Also within this compartment are located the 'Centek' fiberglass lift mufflers for the main generators. There is a bilge suction and bilge alarm sensor installed.

MACHINERY – ENGINE ROOM:

1. 2 - Cummins Diesel Main Engines – Model KTA19-M3 – 640 HP each at 1800 RPM.
 - a. Port Engine maintenance log = Approx. 275 hours since re-power
 - b. Starboard Engine maintenance log = Approx. 275 hours since re-power.
2. 2 – ZF Reverse Reduction Gears for the Main Engines – Model ZF-665A – 1.757 : 1.0
3. 1 – Northern Lights Electrical Generator Set – M844LK - Model PX-320C – 20 Kw – 120-240 VAC / 60 Hz. / 1 Ph.
 - a. Port Engine local panel = Approx. 21,336 hours
4. 1 – Northern Lights Electrical Generator – Model M20CRW2-2.2 – 20 Kw – 120-240 VAC / 60 Hz. / 1 Ph.
 - a. Starboard Engine local panel = Approx. 1535 hours
5. 2 – ZF Mathers control panels for steering
6. 2 – Racor dual fuel filter / separator units for the main engines – Model 751000 FHX – 360 GPH
7. 2 – Racor single fuel filter / separator units for the generators – Model 500 MA – 60 GPH
8. 1 – Do-It-Best electric driven centrifugal irrigation pump (used as a fire pump) – 2” x 1.50” – 1.5 HP
9. 1 – Bilge manifold for 5 compartments
10. 2 – Banks of 8-D marine batteries
11. 1 – 24 VDC Battery Charger - 40 amp

EQUIPMENT – PILOT HOUSE:

1. 1 – SHIP'S WHEEL – Hynautic steering helm and reservoir tank
2. 1 – CAPTAIN'S CHAIR
3. 1 – CHART TABLE
4. 1 – SETTEE with miscellaneous storage below
5. 1 – WOOD BOOK CASE with Company and Vessel Manuals & Publications
6. 1 – PORTABLE FILE BOX with Company Forms
7. 2 – CUMMINS MARINE ENGINE CONTROL PANELS
8. 1 – ZF DUAL LEVER CLUTCH & THROTTLE CONTROL
9. 1 – DANFORTH MAGNETIC COMPASS – Model Empress
10. 1 – FURUNO RADAR
11. 1 – FURUNO INTEGRATED NAVIGATION SYSTEM – Model NavNet vx2
12. 1 – GARMIN GPS – Model GPS-map 741
13. 1 – GARMIN ECHO SOUNDER – Model – echo-MAP CHIRP 74 CV – (New Install)
14. 1 – FURUNO UNIVERSAL AIS - Model FA-150
15. 2 – COBRA VHF – Model DSC
16. 1 – KENWOOD RADIO

17. 1 – SHAKESPEARE RADIO ANTENNA TESTER
18. 1 – MICRONTA FIELD STRENGTH / SWR TESTER
19. 1 – STANDARD HORIZON LOUD HAILER – Model VLH-3000
20. 1 – ELECTRIC WINDSHIELD WIPER
21. 1 – PERKO SEACH LIGHT
22. 1 – SHIP'S HORN
23. 1 – CINTAS FIRST AID CENTER
24. 1 – MEDICAL FIRST AID KIT – Model West Marine EZ-5.0
25. 1 – ZOLL DEFIBRILLATOR – Model AED-PLUS
26. 2 – APRIA HEALTH MEDICAL OXYGEN CYLINDERS & ASSESORIES
27. 4 – ORION HAND FLARES – Model Item # 865
28. 3 – ORION HAND SMOKE FLARES – Model Item # 958
29. 1 – SAFEGARD ADULT TYPE I PFD – Model 63
30. 2 – ABSOLUTE ADULT TYPE III PFD – Model LXPE
31. 1 – PANASONIC PORTABLE STEREO SYSTEM – Model RX-DS620
32. 1 – GE MICROWAVE – Model Small Table-top
33. 1 – FRIGIDAIRE MINI REFRIGERATOR – Model 3.2 cu. Ft.
34. 1 – 10# ABC DRY-CHEMICAL FIRE EXTINGUISHER – Model Hand-Held
35. 1 – 120 – 240 VAC power panel for vessel systems.
36. 1 – 24VDC lighting panel for navigation, e-lighting, and control instrumentation.
37. 1 – 240 VAC power panel for the HVAC system.

EQUIPMENT – SAFETY & FIRE-FIGHTING:

1. 150 – SAFEGARD ADULT TYPE I PFD's – Model 63
2. 33 – SAFEGARD CHILD TYPE I PFD's – Model 67
3. 1 – 30" DIA. LIFE RING with rope – USCG approved
4. 1 – 30" DIA. LIFE RING with water light – USCG approved
5. 1 – FIRE STATION with 1.5" supply valve to 1" rubber hose and combination nozzle
6. 4 – 10# ABC, USCG Type B-II, Dry Chemical hand-held fire extinguishers

VESSEL CONDITION INSPECTION:

A. UNDERWATER HULL:

The underwater hull was fully inspected while in dry-dock at Wilmington Marine Center. The vessel was also in the process of completing the 2-year intermediate USCG inspection for dry docking credit and annual COI endorsement. The USCG inspectors had taken a series of bottom shell UT measurement readings from the inside of compartment # 3 which substantiated that the bottom hull plate thickness was satisfactory. From observation of the UT readings taken, the bottom hull plate diminution appears to average around 15% from the original 3/8". (See photo # 1 & # 2).



Photo # 1 – Port side bottom hull insert



Photo # 2 – P&S bottom insert at keel

During the inspection by the USCG, three (3) areas of hull plate pitting were discovered and were cropped out and inserted with new 3/8" plate. (See photos # 3 & # 4).



Photo # 3 – Port side bottom hull insert



Photo # 4 – P&S bottom insert at keel

Both P&S propeller shafts were cleaned and inspected. New V-strut cutlass bearings were installed. The stern tube and rudder cutlass bearings were examined by USCG and found to be satisfactory to continue in services. They had been previously changed at the last dry dock in 2016. As a matter of reported owner maintenance policy, both P&S propellers were changed

with the spares. The existing props will now be serviced and kept for spares. New zinc anodes were installed at all locations on the hull, the rudders, and the propeller shafts. The hull has been high pressure water blasted and recoated according to the company standard specifications with a final coat of A/F.



Photo # 5 – Starboard tail shaft, prop, and rudder



Photo # 6 – Starboard Propeller



Photo # 7 – Port tail shaft, prop, and rudder



Photo # 8 – Port Propeller

B. EXTERIOR HULL ABOVE THE WATERLINE:

The exterior hull sides were visually inspected and found without significant indents, gouges, or scraps. The hull had been high pressure water blasted and recoated according to the company standard specifications.



Photo # 9 – Starboard side view



Photo # 10 – Port side view



Photo # 11 – Bow View



Photo # 12 – New anodes at the transom

C. MAIN DECK:

During the current inspection, repair work was underway to the hand railings at the 4 different boarding areas. The vertical hand rail stanchions were being cropped out and replaced under recommendation by the USCG inspectors.



Photo # 13 – Stern Deck



Photo # 14 – Aft view of main deck house

The men's and women's toilet spaces were notice to have loose ceiling panels with no batten strips to secure them around the perimeter. Also noted was that the wash basins in both spaces are only provided with cold water connections and no "P-traps" to prevent the passage of odors.



Photo # 15 – Woman's toilet space



Photo # 16 – Men's toilet space



Photo # 17 – Port side main deck house



Photo # 18 – Starboard side main deck house



Photo # 19 – Forward view of deck house



Photo # 20 – Bow sprit with anchor arrangement

D. BRIDGE DECK



Photo # 21 – Stern of the bridge deck



Photo # 22 – Aft bulkhead of the pilot house

E. INTERIOR PILOT HOUSE:

The pilot house was observed to have a significant amount of deterioration to the joiner paneling throughout, the trim around the windows, and in some areas of the console top.

There are several areas around the ceiling linings (above the steering console) which have towels stuffed around cables, or other penetrations which is indicative of some water ingress from the roof. The exact issue was not cited during this inspection.



Photo # 23- Pilot house – forward view



Photo # 24 – Pilot house – aft view

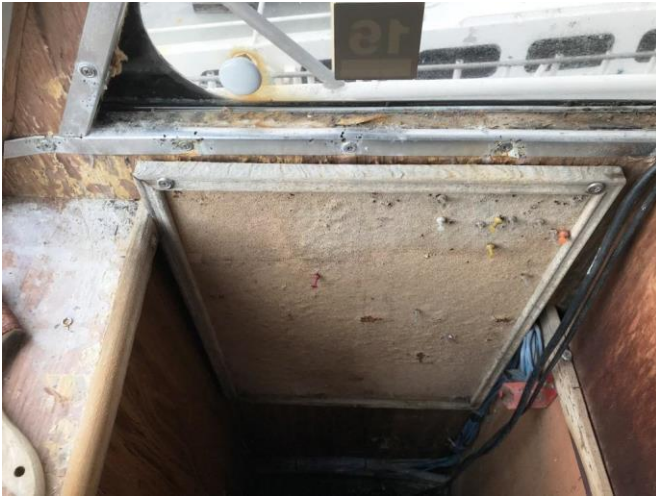


Photo # 23(a) – Deterioration of joiner work



Photo # 24(a) – deterioration of joiner work at doorway

F. INTERIOR DECK HOUSE:

It was noted during this inspection that the overall appearance of the deckhouse interior furnishings show wear and tear, such as to the carpets, the Formica laminates, and the padded upholstery.



Photo # 25 – Main deck house – forward view



Photo # 26 – Main deck house – aft view

G. BELOW DECK HULL COMPARTMENTS:

All hull compartments were inspected and found to be basically sound and without any noticed structural, welding defects, indents, or material distortions. All hull compartments are normally dry 'Void compartments.' Each compartment was observed to have average condition in regards to galvanic oxidation of the metal surfaces. As mentioned previously, 3 noted areas of excessive pitting on the interior side of the bottom plating were required to be cropped-out and inserted with new plating under the inspection of the USCG.

All hull compartments are fit with bilge level sensor alarms and bilge suctions according to the regulations.

As a note, all fuel, freshwater, and sewage tanks are 'independent tanks' (not formed by the hull structure) which allow for full inspection of the internal hull structure.

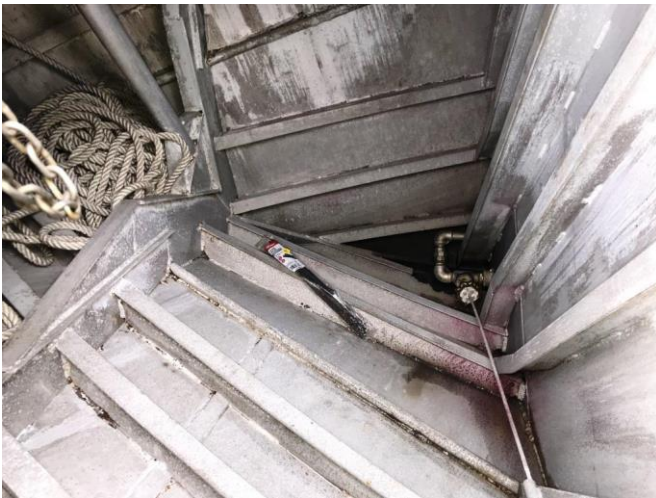


Photo # 27 – Fore peak compartment – looking starboard



Photo # 28 – Compartment # 2 – looking forward



Photo # 29 – Compartment # 3 – looking to port showing main fuel tank & fresh water tank atop



Photo # 30 – Compartment # 3 – looking to port showing portside sewage holding tank



Photo # 31 – Comp. # 4 - Port main engine – 640 HP



Photo # 32 – Comp. # 4 - Starboard main engine – 640 HP

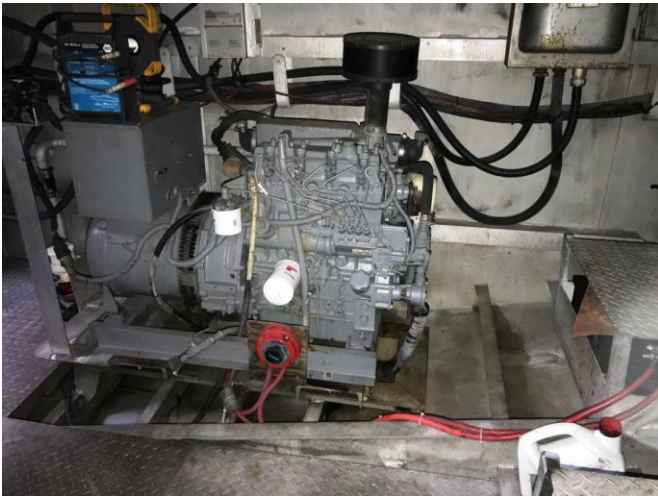


Photo # 33 – Comp. # 4 - Port Generator – 40 Kw



Photo # 34 – Comp. # 4 - Starboard Generator – 40 Kw

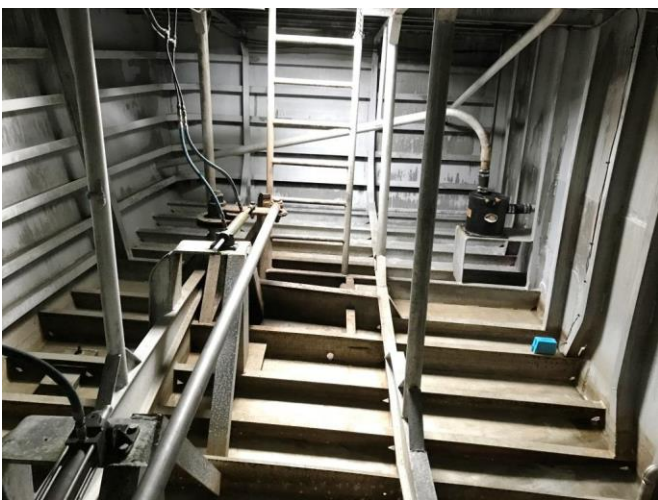


Photo # 35 – Comp. # 5 – Steering room looking to port

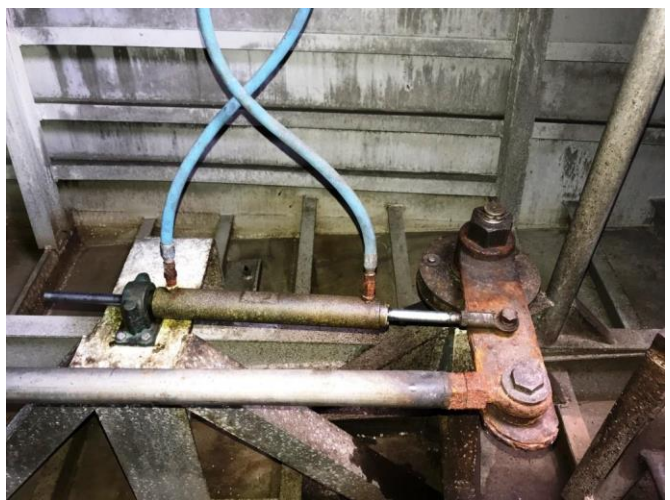


Photo # 36 – Comp. # 5 - Steering arrange. at port tiller-head

VESSEL EVALUATION OF CURRENT CONDITION:

Based on this inspection and in the opinion of the undersigned, the general condition and maintenance of the vessel can be rated according to the following schedule:

RATING SCALE (1-10)

- | | |
|-----|-----------------------|
| 1. | New |
| 2. | Excellent Maintenance |
| 3. | Very Good Maintenance |
| 4. | Well Maintained |
| 5. | Average Maintenance |
| 6. | Fair Maintenance |
| 7. | Poor Maintenance |
| 8. | Very Poor Maintenance |
| 9. | No Maintenance |
| 10. | Scrap |

Description/Area	Rating	Comments
Exterior Structure – (Above Main Dk.)	4	
Internal Structure (Compartments & Tanks)	4	(As available during inspection)
Manholes and Hatches	4	
Exterior Hull & coatings - (Above WL)	2	(Tie coat & Top coat just applied)
Exterior Hull & coatings – (Below WL)	2	(Tie coat and A/F just applied)
Interior Hull & Tank coatings	n/a	
Deck & Deckhouse coatings	5	
Deck Fittings & Machinery	4	
Vessel Machinery	3	
Interior joiner work & linings	7	(Primarily in the Pilot house)
Interior furnishings & carpet	6	(Main deck house & Pilot house)
Piping, sea chests, and valves	4	(As available during inspection)
Electrical installation & lighting	5	(As available during inspection)
Safety & Fire Equipment	5	(As required for current service route)
Vessel Moorings	3	

VALUATION CONDITIONS:

In addition to the observations noted in this report, the following items are considered by the undersigned to have an effect on determining the current market value for this vessel:

- The vessel was USA built and is USA flagged.
- The vessel age is 31 years.
- The vessel is up to date and maintains all required certification by USCG and remains in active passenger service at her current service location.
- The vessel is completing the mandatory 2-year dry-dock inspection and annual COI inspection by the USCG.
- The preventative maintenance program that continues to be used by the current owner /operator contains a verifiable tracking method for the various mechanical systems and maintenance records.
- The vessel was technically ‘repowered’ as both main engines (not the gearboxes) were replaced in June 2018 with factory re-conditioned motors with standard warranty.

COMPARATIVE VESSELS:

This estimate is prepared using the cost and comparable sales approach to determining the estimated value. Our review included discovery of comparable size (USA Flag) aluminum hull vessels as follows:

1.	65’ x 16’ x 7’	(Pax vessel) - 1968 Gulf Craft w/ 2 x GM 12v71 – 800 HP	Asking Price = \$ 168,900
2.	65’ x 21’ x 8’	(Pax vessel.) - 1975 Gulf Craft w/ 2 x John Deere – HP (unk.)	Asking Price = \$ 295,000
3.	65’ x 17’ x 8’	(Crew Boat) - 1971 Breaux w/ 2x GM 12v71 – 950 HP	Asking Price = \$ 300,000
4.	70’ x 17’ x 8’	(Crew Boat) - 1971 Breaux w/ 2 x GM 12v71 – 950 HP	Asking Price = \$ 250,000
5.	75’ x 20’ x 8’	(Pax vessel) – 1973 Depend-A-Craft w/ 2 x GM 12v71 – 1050HP	Asking Price = \$ 425,000
6.	85’ x 20’ x 8’	(Pax vessel) – 1974 Gulf Craft w/ 2 x GM 12v71 – 1100 HP	Asking Price = \$ 699,000

VALUATION:

With consideration of the above information, it is the expressed opinion of the undersigned, that the current “Fair Market Value” (As Is, Where Is) for this vessel can be estimated as follows:

- Estimated Fair Market Price as of November 2018 **\$ 592,500 USD.**

This estimated FMV is determined from consideration of the average selling price for closest comparable vessels which are currently offered for sale in similar service, with adjustments to include the observed conditions noted in this survey.

It is our professional opinion that the remaining useful life expectancy for this vessel should be considered as approximately 5 - 10 years. This opinion is based on the current age of the vessel. It is very common that the yearly costs for maintenance and repairs will significantly increase with a vessel's age, and inversely to the market value. However, as with any vessel, the actual useful life expectancy is primarily contingent upon management policies and the quality of preventative maintenance programs which are employed.

DEFINITIONS:

Fair Market Value is an opinion, expressed in terms of money, at which a property would change hands between a willing buyer and a willing seller, neither under any compulsion to buy or sell, and both having reasonable knowledge of relevant facts, as of a specific date.

Remaining Useful Life is the estimated period which a property of certain effective age is expected to be used before it is retired from service.

Terminal or Residual Value in connection with a tangible asset refers to the value of an asset after expiration of its normal useful life, or the value remaining after part of the property's life has been consumed.

No warranty as to the condition, seaworthiness, or marketability of the subject vessel is expressed or implied in anyway whatsoever by this survey report. Neither the Corporation, nor its officers, directors, surveyors, employees, representatives, nor agents, under any circumstances whatsoever, are to be held responsible for any error of judgement, negligence, omissions, misrepresentations, or misstatements in this report. This inspection is conducted and presented in this report without prejudice, or bias, to any of the Parties concerned.

Respectfully submitted,



KOPCO Marine Services, Inc.

Kirk O. Palmquist – INSB-Class Marine Surveyor

CONDITION & VALUATION SURVEY REPORT

50 Feet x 24 Feet x 8 Feet

**64 GRT / 51 NRT
Twin Screw Push Boat**

CAPT COOPER



PRINCIPAL:	BALD HEAD TRANSPORTATION AUTHORITY P.O. BOX 3069 BALD HEAD ISLAND, NORTH CAROLINA, 28461
REGISTRY:	UNITED STATES OF AMERICA
USA Official No.:	1273502
INSPECTION DATE:	November 17, 2018 & January 5, 2019
REPORT DATE:	January 25, 2019

GENERAL PARTICULARS

CURRENT REGISTRY:	USA – OFFICIAL # 1273502
CURRENT HOME PORT:	BALD HEAD ISLAND, NORTH CAROLINA
CURRENT CALL SIGN:	WDJ-2965
CURRENT OWNERS:	BALD HEAD ISLAND TRANSPORTATION I CHANDLER BUILDING – P.O. BOX 3069 BALD HEAD ISLAND, NC 28461 U.S.A.
CURRENT OPERATORS:	SAME
I.M.O. No.:	N/A
PREVIOUS REGISTRY:	N/A
PREVIOUS HOME PORT:	N/A
MMSI #:	367763460
PREVIOUS NAMES:	N/A
BUILT BY:	METAL TRADES, INC. 4149 HWY. 165 HOLLYWOOD, SOUTH CAROLINA, 29449 U.S.A.
HULL NO.	122
DATE OF CONSTRUCTION:	2017
REGISTERED G.R.T.:	64
REGISTERED N.R.T.:	51
ITC-69 G.R.T.:	N/A
ITC-69 N.R.T.:	N/A
TYPE OF SERVICE:	TUGBOAT – USCG SUB-CHAPTER ‘M’
SERVICE AREA:	COASTWISE
MAX. # OF PAX:	0
MAX # OF CREW:	2
L.O.A.:	50.00 FEET
L. (ART. 2 (8)):	N/A
MOULDED BREADTH:	24.00 FEET

MOULDED DEPTH:	8.00 FEET
MOULDED DRAFT (APPROX):	5.20 FEET
DEADWEIGHT:	UNK
LIGHTSHIP:	UNK.
FUEL CAPACITY:	3800 Gallons – (Approx.)
FRESH WATER CAPACITY:	78 Gallons – (Approx.)
BLACK WATER CAPACITY:	N/A
MAIN ENGINES:	2 x JOHN DEERE, 6135AFM85, 425 HP @ 1900 RPM – (TIER 3)
AUXILLIARIES:	2 x NORTHERN LIGHTS – 40 Kw
SERVICE SPEED:	8 Knots (Approx.)
CLASS SOCIETY:	N/A
PREVIOUS DRY-DOCK:	N/A – (NEW CONSTRUCTION 2017)
RECENT DRY-DOCK:	JANUARY 5, 2019 - (for condition inspection report)
NEXT DRY-DOCK:	NOT YET SCHEDULED

CERTIFICATION:

- | | | |
|---|--------------------|---------------------|
| • USCG CERTIFICATE OF DOCUMENTATION (COD) | ISSUED: 07-25-2018 | EXPIRES: 08-31-2019 |
| • USCG CERTIFICATE OF INSPECTION (COI) | ISSUED: N/A | EXPIRES: N/A |
| • STABILITY LETTER | ISSUED: | EXPIRES: N/A |
| • FCC RADIO STATION LICENSE | ISSUED: 11-29-2016 | EXPIRES: 11-29-2026 |

CONDITION OF INSPECTION:

THIS IS TO CERTIFY that the Push Boat CAPT COOPER was inspected by the undersigned Marine Inspector on November 17, 2018 & January 5, 2019 for the purpose of determining the Condition & Valuation of the vessel. The vessel was hauled on January 5, 2019 in dry dock at Wilmington, North Carolina at the terminal facility of Wilmington Marine Center, 3410 River Road, Wilmington, North Carolina, 28412, for the purpose of this inspection report.

The vessel was prepared for inspection with all hull compartments open, ventilated, and available for inspection.

This Condition and Valuation survey Report was requested by Bald Head Island Transportation Authority and is for their account.

GENERAL VESSEL DESCRIPTION:

The CAPT COOPER is a 850 HP coastwise Push Boat, built in 2017 by Metal Trades, Inc. of Hollywood, South Carolina. The vessel was delivered around August of 2017 and has been operating for about 1.5 years in its current trade. The vessel is currently 'un-inspected' by the United States Coast Guard (USCG), but is scheduled to undergo inspection based on the new Sub-Chapter M rules and regulations this year. The vessel currently operates with a crew of 2. It is in dedicated service between Southport, North Carolina and Bald Head Island, North Carolina pushing the deck barge BRANDON RANDALL with vehicles and various support materials for the island's residents.

The vessel is a flat bottom hull with a single chine, vertical sides, and is of all welded steel construction. An all-aluminum deck house and elevated pilot house structure sits atop the hull. The square bow is fit with two pushing knees with 'D' rubber fenders on the face of each knee. The square stern is fit with twin props with dual rudders and dual flanking rudders for each shaft. The vessel has a small single plate skeg on centerlines. The vessel has 4.00" diameter propeller shafts supported by water lubricated cutlass bearings that exit thru the hull stern tubes and then are supported by another set of cutlass bearings at the "v-struts" just in front of the propellers. The propellers are fixed, 5-blade, Nibral, 48" diameter x 35 pitch. The deck of the vessel has a no camber, or sheer. The vessel has a total of six (6) hull compartments. The fore peak and aft peak, both SW Ballast compartments are accessed via 18" diameter, flush water-tight manholes on the open deck. The remaining under deck compartments are accessed directly from the engine room via standard watertight doors.

The hull is transversely framed throughout. Beginning from the bow, the fore peak is a ballast tank. The 2nd compartment is the forward void space. The 3rd compartment is where the centerline fuel oil tanks are and outboard passageways to the forward void compartment. The 4th compartment is the lower engine room. The 5th compartment is the aft void space. The 6th and final compartment is the aft peak ballast tank. The vessel has four (5) continuous transverse water-tight bulkheads. Frame spacing is 2'-0" throughout. The bottom hull shell plating is noted to be 3/8". Heavy inserts in the bottom are fit in way of the P&S prop-shaft struts, at all eight rudder tubes, and both stern tube penetrations. The side shell is fit with a large P&S recess in which the Fernstrum main engine grid coolers are mounted. The vessel has a full-length 4" split-pipe steel fender at the main deck level

The vessel is fit with a standard Panama Canal closed chock mounted into the bulwark at the bow on centerline and a fabricated 12" 'horned' double bitt. There are two fabricated 6" double bitts mounted at the P&S bow bulwarks at the bow, two more at the P&S stern bulwarks for mooring purposes. On the bow are two Patterson 30-Ton, 5-HP electric winches with electric brake and reel-in / reel out capability that are used for barge securing. The soft lines from the winches run through 12" roller chocks to the barge mooring fitting and return to the tugboat's fixed button chock. A single Fortress aluminum anchor with a leading section of chain and soft rope is provided at the stern. A plate bulwark with freeing ports is fit completely around the main deck. Additional pipe handrails are fit at the stern atop the bulwarks.

The main deckhouse, the support structure for the elevated pilot house, are and the pilot house are fabricated out of aluminum to conserve weight and stability. The main deck house is composed of two sections. The forward part of the main deck house

provides consoles for engine monitoring and engine/steering controls, the main electrical switchboard, the winch controls, fire pump control, emergency fuel shut-down, a general crew work space, and dual VHF radio communications.

The after part of the main deck house, which is accessed from the control room via a fume-tight door, encompasses the upper engine room space. The upper engine room space contains the two main generators, the engine room ventilation machinery, the exhaust piping, and various electrical motor starters. The vessel is provided with a 100 Amp shore-power connection.

Due to the specialized 'short-run' service that the vessel is used for, the design did not incorporate any crew accommodations aboard.

The deckhouse is accessible through P&S water-tight doors which enter into the crew / engine control space. Mounted at the aft bulkhead of the deckhouse is another water-tight door which provides for a secondary escape onto the aft deck from the upper engine room space. Four large fixed-pane windows are fit in the control area, and two more in the upper engine room area. The control room of the deckhouse is fully insulated as well as air-conditioned and heated by a single HVAC unit that is mounted on the roof top above. Standard fluorescent and emergency lighting is provided. There are no joiner panels fit to any of the bulkheads, or the ceiling areas. The deck within the control space is a 'dex-o-tex' type troweled monolithic flooring system. The flooring in the upper engine room is painted steel with non-skid walking areas.

The roof of the main deck house is accessed by an inclined ladder from the bow. Atop the deck house roof is mounted a cabinet for the Fireboy-Xintex fixed CO-2 fire system for the engine room, the compressor for the HVAC system for the deckhouse, and the main engine and generator exhaust silencers. An open structure is further built atop the deck house which supports the elevated pilot house above.

The elevated pilot house provides an excellent field of view for the Captain. The pilot house is accessed by an inclined ladder from the roof of the main deck house. The pilot house is outfitted with a complete steering console, navigation electronics, dual captain's chairs, a chart table, fire monitoring /alarm panel, engine room fixed fire activation controls, the radio station, the remote starting for the fire pumps, and ventilation shutdowns. Fixed windows are fit on all sides of the pilot house which provide 360 degree visibility. Atop the pilot house are the main mast, radar foundations, the ship's horn, and all radio electronics antenna mountings. The pilothouse is insulated and air conditioned / heated with a roof top mounted unit. The pilot house has no joiner paneling but does have a commercial-style acoustical drop-in ceiling. The deck is similar to the main deckhouse control space.

The below deck arrangements is as follows:

- A. The Fore Peak is the forward P&S ballast tanks.
- B. The Second compartment aft is a void space that is accessed from the lower engine room. This compartment also has a bilge suction and a bilge alarm installed.
- C. The third compartment aft (centerline) is the main P&S fuel oil tanks. Fuel storage is approximately 3800 gallons in total. The tank bottom is approximately 2.5-feet above the bottom hull of the vessel. The filling location for these tanks is located on the main deck at the bow.

- D. The Fourth compartment aft is the main engine room. The twin John Deere main engines are turbo-charged and heat exchanger cooled and fit with standard exhausts. Each motor is fit with its own engine driven hydraulic pump for the steering system. The 4.00" tail shafts are fit with 'dripless style' shaft seals and supplied with cooling water via a small electric pump. Also, within the lower engine room is a 26-gallon, 2-HP air compressor with tank which provides service air for the vessel. P&S electric driven fire / de-watering pumps are mounted in the lower engine room and fit with a local start/stop. Forward and aft ballast pumps with fill / discharge manifolds are installed in the lower engine room. All motors are electric start. The engine room is fit with sea suction and strainers for cooling water and fire-fighting, a fuel distribution piping system, and bilge alarm sensor.
- E. The Fifth compartment aft is a void space that is accessed from the lower engine room. This compartment also has a bilge suction and a bilge alarm installed T
- F. The Sixth, and aftermost compartment are the aft P&S ballast tanks.

The steering gear arrangement, which is all above deck mounted, is supplied by 'ZF' and consists of quad hydraulic cylinders. A single cylinder is mounted at each of the four tiller heads that control the standard and flanking rudders.

MACHINERY – ENGINE ROOM:

- 1. 2 – John Deere Diesel Main Engines – Model 6135AFM85 – 425 HP each at 1900 RPM. (Tier 3)
 - a. Port Engine maintenance log = Approx. 2200 hours since installed
 - b. Starboard Engine maintenance log = Approx. 2200 hours since installed.
- 2. 2 – ZF Reverse Reduction Gears for the Main Engines – Model ZFW-350-1 – 3.968 : 1.0
- 3. 1 – Northern Lights Electrical Generator Set – Model M40C3 – 40 Kw – 120-208 VAC / 60 Hz. / 3 Ph.
 - a. Port Engine local panel = Approx. 927 hours
- 4. 1 – Northern Lights Electrical Generator – Model M40C3 – 40 Kw – 120-208 VAC / 60 Hz. / 3 Ph.
 - a. Starboard Engine local panel = Approx. 1609 hours
- 5. 2 – Racor dual fuel filter / separator units for the main engines
- 6. 2 – Racor dual fuel filter / separator units for the generator
- 7. 2 – Engine driven steering pumps
- 8. 2 – 5 HP electric driven fire pumps with strainers – AMPCO Model ZC2 - 2" x 1.50" – 3500 RPM
- 9. 2 – Electric driven Ballast pumps w/ manifold for 2 compartments
- 10. 2 – Banks of 8-D marine batteries
- 11. 1 – 2-HP Speed-Aire model 4YN50B air compressor and 26-gallon accumulator tank

EQUIPMENT – ELEVATED PILOT HOUSE:

- 1. 1 – MAIN STEERING CONSOLE – Twin John Deere Engine Monitoring & Murphy engine alarm panel, ZF air throttle controls, twin Skipper hydraulics non-follow-up steering levers for standard and flanking rudders, Exalto wiper control panel, Kahlenberg digital control panel for the vessel' air horn, and the general alarm contactor.

2. 1 – SECONDARY CONSOLE – A 6” Richie magnetic steering compass Model Power-damp, Skipper hydraulics start / stop steering pump controls, twin Northern Lights generator control panels, twin Kobelt rudder angle indicators (RAI’s) for the standard and flanking rudders, twin lever controls for the port and starboard Patterson deck winches, Start / stop electrical controls for the P&S deck winches, a 120 VAC electric meter, and a Shakespeare VHF Radio Antenna tester model ART-3, and the emergency stop for the ventilation fans.
3. 1- OVERHEAD CONSOLE – P&S main fire pump start / stop controls with indicator lighting, bilge alarm panel, P&S engine room supply fan start / stop controls with indicator lighting, a the main cooling water pump start / stop control with indicator light.
4. 2 – LaBroc Industries swivel style Captain Chairs
5. 1 – CHART TABLE
6. 1 – 8-space Navigation Lighting Control Panel
7. 1 – 4-gang light switch panel for the flood, search, and general deck lighting
8. 1 – 12 VDC service panel for engine and compartment alarms, radios, emergency lighting, and navigation electronics
9. 1 – 120 VAC service panel of general lighting, battery charging, fire detection, 12 volt power supplies, and standard receptacles.
10. Remote release station for the engine room’s fixed CO-2 system
11. 12 – PAINS-WESSEX FLARES, Model MK8 in a water-proof container
12. 1 – MIRCOM fire detection control and alarm panel
13. 1 – FURUNO RADAR
14. 1 – FURUNO Depth Finder
15. 1 – FURUNO Chart Plotter
16. 1 - FURUNO UNIVERSAL AIS - Model FA-150
17. 2 – ICOM VHF RADIOS – Model IC-M-324 DSC
18. 1 – STANDARD HORIZON LOUD HAILER – Model VLH-3000
19. 1 – PERKO “Solar-Ray” SEACH LIGHT
20. 1 – KALenberg SHIP’S HORN – Model D-2CVL
21. 1 – SAMSUNG Mini-Split Heat-Pump 1.5-Ton HVAC conditioning unit

EQUIPMENT – LOWER CONTROL HOUSE:

22. 1 – REMOTE MAIN STEERING CONSOLE – Twin John Deere Engine Monitoring panel, ZF air throttle controls, twin Skipper hydraulics non-follow-up steering levers for standard and flanking rudders
23. 2 – ICOM VHF RADIOS – Model IC-M-324 DSC
24. 1- OVERHEAD CONSOLE – twin lever controls for the port and starboard Patterson deck winches, Start / stop electrical controls for the P&S deck winches, twin Kobelt rudder angle indicators (RAI’s) for the standard and flanking rudders, and the emergency stop for the ventilation fans, and a MIRCOM remote fire detection panel.
25. 1 - Remote release station for the engine room’s fixed CO-2 system
26. 1 - CINTAS FIRST AID CENTER
27. 3 – ORION HAND SMOKE FLARES – Model Item # 958

28. 4 – ORION 12 Ga. RED AERIAL FLARES – Model Item # 584
29. 1 – ADULT TYPE I PFD
30. 1 - ADULT TYPE III PFD
31. 1 – Toaster oven
32. 1 – PANASONIC MICROWAVE – Model Small Table-top
33. 1 – FRIGIDAIRE MINI REFRIGERATOR – Model 3.2 cu. Ft.
34. 2 – 10# ABC DRY-CHEMICAL FIRE EXTINGUISHER – Model Hand-Held
35. 1 – SAMSUNG Mini-Split Heat-Pump 2.0-Ton HVAC conditioning unit
36. 1 - Workbench with vise and rolling tool storage cabinet.
37. 4 – small metal storage lockers.
38. 1 – small sink with gravity fed fresh water from an independent freshwater storage tank (78 gallon capacity)
39. 4 – Remote fuel oil shut offs for each generator and main engine
40. 2 – 120 / 208 Power service breaker panels
41. 2 – Motor Starters for the P&S main Fire Pumps

EQUIPMENT – SAFETY & FIRE-FIGHTING:

1. 2 – 30” DIA. LIFE RING with rope – USCG approved
2. 1 – 30” DIA. LIFE RING with water light – USCG approved
3. 2 – FIRE STATION with 1.5” supply valve to 1.50” x 50’ fire hose and combination nozzle
4. 1 – Fire Axe
5. 1 – Fixed-fire system for the engine room with 3 – 100# cylinders (Fireboy-Xintex)
6. 1 – MIRCOM fixed fire detection system

VESSEL PHOTOS:



Photo # 1 – Stbd. side elevation



Photo # 2 – Port side elevation



Photo # 3 – Stern elevation



Photo # 4 – Bow pushing knees



Photo # 5 – Port side main engine grid cooler and sea chests



Photo # 6 – Port tail shaft, prop, and rudders



Photo # 7 – Stbd. tail shaft, prop, and rudders



Photo # 8 – Stern view of hull



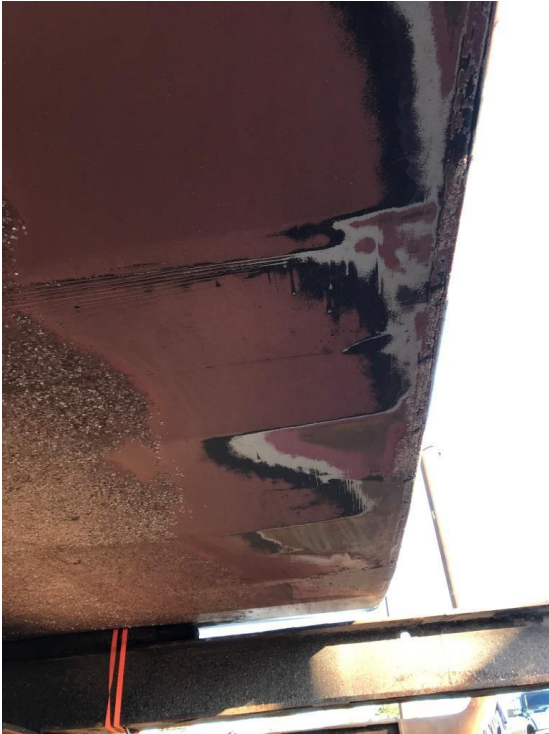


Photo # 9 – Bottom hull showing coating wear from grounding

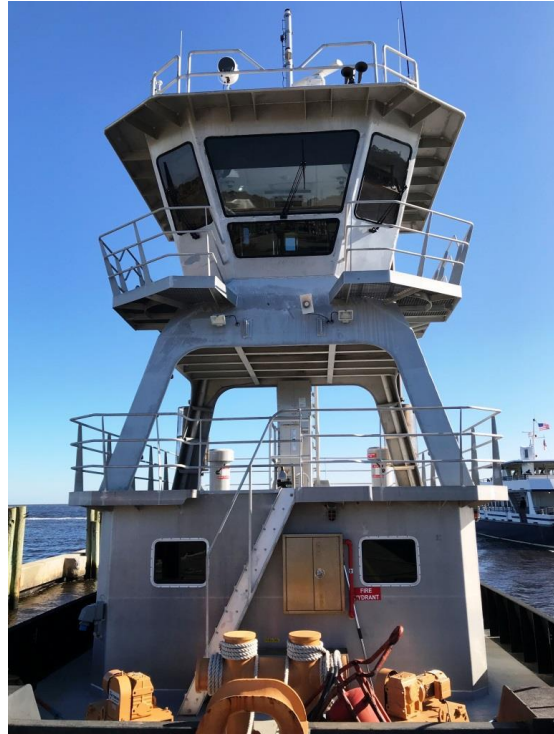


Photo # 10 – Forward view



Photo # 11 – Starboard side view



Photo # 12 – Aft side view of elevated pilot house



Photo # 13 – Starboard view inside pilot house



Photo # 14 – port view inside pilot house



Photo # 15 – Forward view in elevated pilot house



Photo # 16 – Steering controls in elevated pilot house



Photo # 17 – Stern view from pilot house



Photo # 18 – Bow arrangement



Photo # 19 – Fixed fire system on deck house roof



Photo # 20 – Main Deck house control room – looking port



Photo # 21 – Main deck house control room – looking stbd.



Photo # 22 – Main switchboard



Photo # 23- Main Deckhouse Steering Station



Photo # 24 – Upper engine room – aft view



Photo # 25 – Stbd. 40 kW generator set



Photo # 26 – Port main engine – John Deere 425 HP

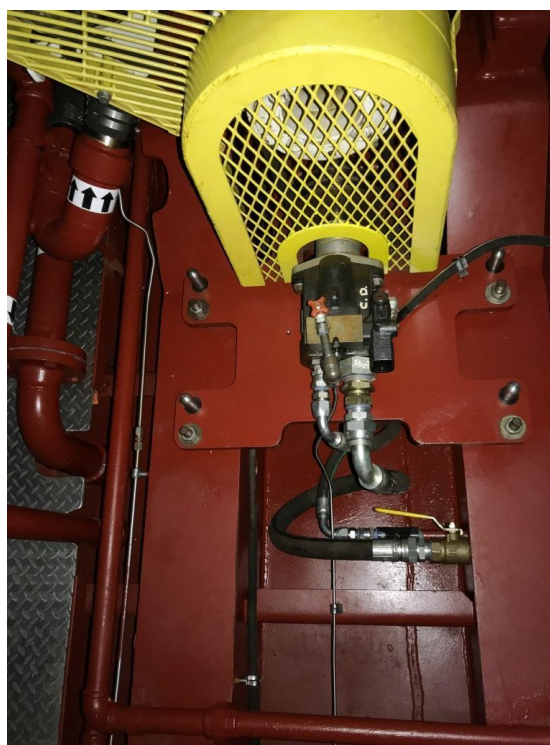


Photo # 27 – Port tail shaft



Photo # 28 – Hydraulic steering pump @ main engine

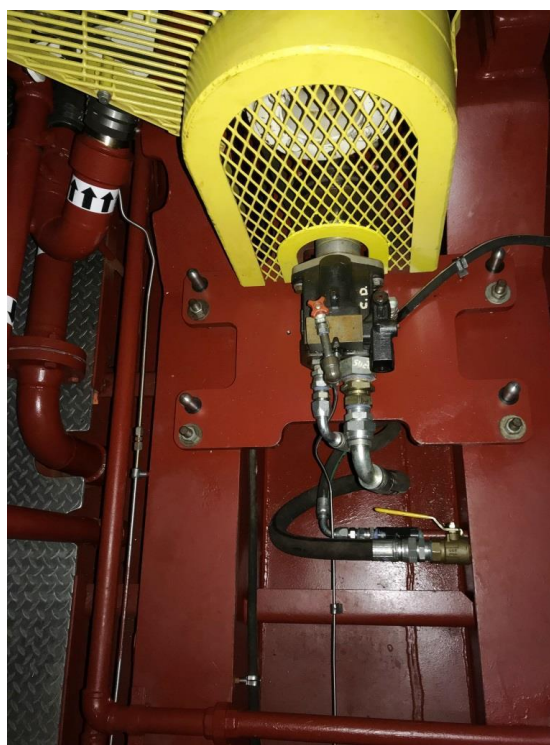




Photo # 29 – Sea suction & keel cooler connection



Photo # 30 – Main fire pump starboard side



Photo # 31 – Comp # 3 void space



Photo # 32 – Entrance from engine room to Comp # 2



Photo # 33 – Comp. # 5 Void Space



Photo # 34 – Ballast pump & Manifold



Photo # 35 – Air compressor

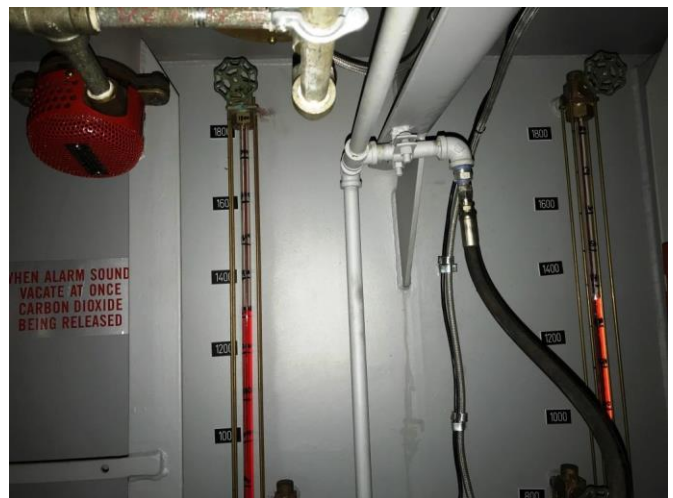


Photo # 36 – Main fuel oil tank liquid level gauges

VESSEL EVALUATION OF CURRENT CONDITION:

Based on this inspection and in the opinion of the undersigned, the general condition and maintenance of the vessel can be rated according to the following schedule:

RATING SCALE (1-10)

- | | |
|-----|-----------------------|
| 1. | New |
| 2. | Excellent Maintenance |
| 3. | Very Good Maintenance |
| 4. | Well Maintained |
| 5. | Average Maintenance |
| 6. | Fair Maintenance |
| 7. | Poor Maintenance |
| 8. | Very Poor Maintenance |
| 9. | No Maintenance |
| 10. | Scrap |

Description/Area	Rating	Comments
Exterior Structure – (Above Main Dk.)	2	
Internal Structure (Compartments & Tanks)	2	
Manholes and Hatches	2	
Exterior Hull & coatings - (Above WL)	2	
Exterior Hull & coatings – (Below WL)	4	(Some minor wear from grounding)
Interior Hull & Tank coatings	2	
Deck & Deckhouse coatings	n/a	(Aluminum structure un-coated)
Deck Fittings & Machinery	2	
Vessel Machinery	2	
Interior joiner work & linings	2	
Interior furnishings & deck coverings	2	
Piping, sea chests, and valves	2	
Electrical installation & lighting	2	
Safety & Fire Equipment	2	
Vessel Moorings	2	

VALUATION CONDITIONS:

In addition to the observations noted in this report, the following items are considered by the undersigned to have an effect on determining the current market value for this vessel:

- The vessel was USA built and is USA flagged.
- The vessel age is 1.5 years.
- The vessel is up to date and maintains all required documentation by USCG and remains in active service at her current service location.
- The vessel is well prepared to comply with Sub-chapter M inspection by the USCG.
- The preventative maintenance program that continues to be used by the current owner /operator contains a verifiable tracking method for the various mechanical systems and maintenance records.

COMPARATIVE VESSELS:

This estimate is prepared using the cost and comparable sales approach to determining the estimated value. Our review included discovery of comparable size (USA Flag) Push Boat vessels as follows:

1.	54' x 22' x 8'	(Pushboat) - 1999 w/ 2 x Cummins QSM11 – 710 HP	Asking Price = \$ 775,000
2.	54' x 24' x 7'	(Pushboat) - 2000 w/ 3 x GM 8V71 – 900 HP	Asking Price = \$ 775,000
3.	52' x 20' x 8'	(Pushboat) - 1974 w/ 2 x Mitsubishi S6-A3 – 966 HP	Asking Price = \$ 475,000
4.	52' x 21' x 8'	(Pushboat) - 1984 w/ 2 x Cummins KT 19 – 1000 HP	Asking Price = \$ 375,000
5.	56' x 21' x 8'	(Pushboat) – 2002 w/ 2 x GM 12v92 – 1200HP	Asking Price = \$ 630,000
6.	72 x 28' x 8'	(Pushboat) – 2008 w/ 2 x Cummins KTA-19 – 1200 HP	Asking Price = \$ 925,000

VALUATION:

Due to the vessel's recent build and young age, an estimated FMV for this report is analyzed in comparison with the residual market values of the older vessels, as noted above, with regards to their current age, an estimated depreciation values over a 30-year period of time, and an estimated cost of construction changes since they were built.

With consideration of the above information, it is the expressed opinion of the undersigned, that the current "Fair Market Value" (As Is, Where Is) for this vessel can be estimated as follows:

- Estimated Fair Market Price **\$ 2,100,000 USD.**

This above estimated FMV is determined from consideration of the average selling price for similar design and equipped vessels which are currently offered for sale, with adjustments to include the observed conditions noted in this survey. It is our professional opinion that the remaining useful life expectancy for this vessel can be estimated to be 30 (+) years with continued upkeep and maintenance.

DEFINITIONS:

Fair Market Value is an opinion, expressed in terms of money, at which a property would change hands between a willing buyer and a willing seller, neither under any compulsion to buy or sell, and both having reasonable knowledge of relevant facts, as of a specific date.

Remaining Useful Life is the estimated period which a property of certain effective age is expected to be used before it is retired from service.

Terminal or Residual Value in connection with a tangible asset refers to the value of an asset after expiration of its normal useful life, or the value remaining after part of the property's life has been consumed.

No warranty as to the condition, seaworthiness, or marketability of the subject vessel is expressed or implied in anyway whatsoever by this survey report. Neither the Corporation, nor its officers, directors, surveyors, employees, representatives, nor agents, under any circumstances whatsoever, are to be held responsible for any error of judgement, negligence, omissions, misrepresentations, or misstatements in this report. This inspection is conducted and presented in this report without prejudice, or bias, to any of the Parties concerned.

Respectfully submitted,



KOPCO Marine Services, Inc.

Kirk O. Palmquist – INSB-Class Marine Surveyor

CONDITION & VALUATION SURVEY REPORT

82 Feet x 28 Feet x 8.5 Feet

**77 GRT / 52 NRT
Passenger Ferry Vessel**

PATRIOT



PRINCIPAL:

**BALD HEAD TRANSPORTATION AUTHORITY
P.O. BOX 3069
BALD HEAD ISLAND, NORTH CAROLINA, 28461**

REGISTRY:

UNITED STATES OF AMERICA

USA Official No.:

1145046

INSPECTION DATE:

November 17, 2018 & January 7, 2019

REPORT DATE:

February 1, 2019

GENERAL PARTICULARS

CURRENT REGISTRY:	USA – OFFICIAL # 1145046
CURRENT HOME PORT:	BALD HEAD ISLAND, NORTH CAROLINA
CURRENT CALL SIGN:	WDB-5255
CURRENT OWNERS:	BALD HEAD ISLAND TRANSPORTATION, INC. # 6 MARINA WYND P.O. BOX 3069 BALD HEAD ISLAND, NC 28461 U.S.A.
CURRENT OPERATORS:	SAME
I.M.O. No.:	N/A
PREVIOUS REGISTRY:	N/A
PREVIOUS HOME PORT:	N/A
MMSI #:	366907630
PREVIOUS NAMES:	N/A
BUILT BY:	ISLAND BOATS 5109 EAST OLD SPANISH TRAIL JEANERETTE, LOUISIANA, 70544 U.S.A.
HULL NO.	10051
DATE OF CONSTRUCTION:	2003
DATE KEEL LAID:	Unk.
DATE OF DELIVREY:	August 28, 2003
REGISTERED G.R.T.:	77
REGISTERED N.R.T.:	52
ITC-69 G.R.T.:	115
ITC-69 N.R.T.:	47
TYPE OF SERVICE:	PASSENGER – USCG SUB-CHAPTER ‘T’
SERVICE AREA:	LAKES, BAYS, & SOUNDS, NOT MORE THAN 1 MILE FROM SHORE
MAX. # OF PAX:	150
MAX # OF CREW:	3 + 1 OTHER PERSON IN CREW

L.O.A.:	82 FEET
L. (ART. 2 (8)):	N/A
MOULDED BREADTH:	28.00 FEET
MOULDED DEPTH:	8.50 FEET
MAX. MOULDED DRAFT:	4.25 FEET – (About)
DEADWEIGHT:	UNK.
LIGHTSHIP:	51.76 LT
FUEL CAPACITY:	1800 Gallons – (Approx.)
FRESH WATER CAPACITY:	400 Gallons – (Approx.)
BLACK WATER CAPACITY:	400 Gallons – (Approx.)
MAIN ENGINES:	2 x CUMMINS – KTA19-M3 – 640 HP @ 1800 RPM
GEAR BOXES:	2 x ZF – BW-665-A – 1.970 : 1.0
AUXILLIARIES:	2 x ISUZU – ML-40-INKD – 208/ 240 VAC - 40 kW
SERVICE SPEED:	15 Knots (Approx.)
CLASS SOCIETY:	N/A
PREVIOUS DRY-DOCK:	NOVEMBER 12, 2015
RECENT DRY-DOCK:	DECEMBER 11, 2017
NEXT DRY-DOCK:	DECEMBER 31, 2019

CERTIFICATION:

- | | | |
|---|--------------------|---------------------|
| • USCG CERTIFICATE OF DOCUMENTATION (COD) | ISSUED: 03-24-2018 | EXPIRES: 04-30-2019 |
| • USCG CERTIFICATE OF INSPECTION (COI) | ISSUED: 09-11-2018 | EXPIRES: 09-11-2023 |
| • USCG STABILITY LETTER | ISSUED: 11-23-2011 | EXPIRES: N/A |
| • FCC RADIO STATION LICENSE | ISSUED: 04-30-2018 | EXPIRES: 04-29-2023 |

CONDITION OF INSPECTION:

THIS IS TO CERTIFY that the Passenger Ferry PATRIOT was inspected by the undersigned Marine Inspector on November 17, 2018 and later in dry dock on January 07, 2019 for the purpose of determining the Condition & Valuation of the vessel. The vessel was in dry dock at Wilmington, North Carolina at the terminal facility of Wilmington Marine Center, 3410 River Road, Wilmington, North Carolina, 28412.

The vessel was prepared for inspection with all hull compartments open, ventilated, and available for inspection.

This Condition and Valuation survey Report was requested by Bald Head Island Transportation Authority and is for their account.

GENERAL VESSEL DESCRIPTION:

The PATRIOT is a 150 Passenger Catamaran Ferry, built in 2003 by Island Boats, Inc. of Jeanerette, Louisiana. The vessel is inspected by the United States Coast Guard (USCG) under Sub-Chapter T Rules and regulations. The vessel currently maintains a valid COI for operation with a maximum of 150 passengers plus 4 crew members. It is in dedicated ferry service between Southport, North Carolina and Bald Head Island, North Carolina.

The vessel is a catamaran hull of all welded aluminum construction. The bow stems are nearly vertical. The transoms are slightly curved. The vessel has a 1" stem & keel bar on the centerline of each pontoon. It is twin screw with twin spade rudders. The vessel has 3.00" diameter stainless steel propeller shafts supported by water lubricated flanged cutlass bearing at the hull stern tube exit and then supported by another flanged cutlass bearing at the "v-struts" just in front of the propellers. The propellers are a fixed, 4-blade, NiBral, 36" diameter x 34" pitch. The rudder stocks are 4.50" diameter stainless steel with 5/8" thick rudder blades.

The deck of the vessel has camber, but no sheer. Each hull has a total of SEVEN (7) hull compartments which are accessed via 24" x 24" flush, or 20" diameter round cast aluminum lift-out water-tight hatches as manufactured by FREEMAN Marine (Series 2400) on the open deck. The engine room is fit with a 30" x 30" FREEMAN hinged hatch and a large rectangular 'soft patch' for engine removal.

Each hull is longitudinally framed from the stem to the transom. Each hull has SIX (6) continuous transverse water-tight bulkheads. Frame spacing is 3'-6" throughout. The bottom hull shell plating is 3/8" with 5" x 2" x 1/4" T-bar longitudinal stiffeners. The outboard side shell plates are 5/16" with 3" x 2" x 1/4" T-bar longitudinal stiffeners. The inboard side shell plates are 1/4" with 3" x 2" x 1/4" T-bar longitudinal stiffeners. The main deck plating is 1/4" with 2" x 2" x 1/4" T-bar longitudinal stiffeners. Heavy (approximately 1/2") reinforcing double plates are fit in way of the strut supports on the bottom. The P&S side shells have a full-length aluminum split-pipe and flat bar combination fender at the main deck level.

The vessel is fit with four (6) 6" fabricated single bitts with horns. The bitts are located at the P&S bow, along the P&S mid-body, and P&S at the stern which are for mooring purposes. A single 60# "CLAW" style anchor with a leading 50' section of 3/8" galvanized chain and spliced with 200' of 1.25" soft nylon rope is provided at centerline on the 'raised bow'. The anchor is launched and retrieved via a Maxwell 4000 windlass-capstan combination. A stainless steel roller is fit overhanging the bow on centerline to direct the anchor chain and rope. A combination plate bulwark and pipe handrails are fit completely around the main deck. Passenger 'boarding gates' are built into the P&S bulwarks at two locations P&S along the mid-body. Near to the stern P&S, the bulwark is open for the loading of rolling luggage dollies for storage onto the after deck. Safety netting is installed at these bulwark openings when not in use. Sufficient freeing ports are built into the bulwarks for drainage.

On the starboard side of the vessel is fit a Life-Sling-2 ‘man-over-board’ recovery system and a Forespar manual recovery davit.

The main deckhouse for passengers is accessible through P&S sliding weather-tight doors and a single hinged weather-tight door at the aft bulkhead. The deck house is fit with TWENTY-THREE (23) large marine-style fixed windows on the forward and P&S sides. The aft door leads onto the aft deck to the men’s and women’s restrooms, the inclined ladders to the upper deck, and the aft boarding station.

The separate restrooms are built into the aft end of the deck house and are ventilated by the HVAC system. The restrooms are fit with a marine light fixture, a marine style toilet, a small rectangular ceramic wash basin with a 6” faucet (only cold water supplied), a bulkhead mounted soap dispenser, a bulkhead mounted toilet paper holder, a bulkhead mounted electric hand-drier, a mirror, and a small metal trash can. Inside the restrooms are large panels to access the after air conditioning system for the passenger deck house.

The interior of the passenger deck house is outfitted with pre-fabricates upholstered bench-seating with storage compartments beneath for lifejackets. The bench seating is arranged around Formica-covered tables that can accommodate approximately about SIXTY-EIGHT (68) persons comfortably seated. Stowage for a total of 80 adult lifejackets and 13 child lifejackets is provided inside the deck house. The deckhouse is both air-conditioned and heated by 2 5-Ton self-contained, sea-water cooled HVAC units with heat strips mounted at the aft end of the deck house. Standard fluorescent and emergency lighting is provided. FOUR (4) box speakers are installed in overhead of the deck house for announcements and entertainment. The ceiling is covered with aluminum marine-style grid panels. The bulkheads are sheathed with aluminum panels which are screwed to the framing and covered with wallpaper. The deck is carpeted with glued-down indoor-outdoor style carpeting.

Across the stern of the main deck is the storage area for the wheeled dollies that are used for transporting passenger luggage and other items. The space provided can approximately accommodate up to TWENTY-TWO (22) dollies at one time. Rubber bumpers are installed around the perimeter of the area for protection of the dollies. All exterior decks are painted and with a non-skid surface treatment.

The pilot house sits atop the bridge deck and is accessed by two inclined ladders from the stern deck. The bridge deck is accessible to passengers and can accommodate a maximum total of SEVENTY-SIX (76) persons. Across the aft end of the pilot house is a fabricated aluminum bench seating. Aluminum storage boxes are provide at the aft end of the bridge deck that accommodate lifejackets – (75 Adult & 15-Children). On the aft bridge deck there are additional aluminum bench seating built into the bulwark for seating. The bridge deck is also completely surrounded by a combination of plate bulwark and pipe handrails.

The pilot house is outfitted with a complete steering console, a captain’s chair, a metal chart table with under stowage cabinets and file cabinets. Fixed windows are fit on all sides of the pilot house which provide 360 degree visibility. The THREE (3) center fixed windows on the forward bulkhead are each fit with 24 VDC windshield wipers. Atop the pilot house are the main mast, radar foundations, the ship’s horn, and all radio electronics antenna mountings. The interior of the

pilothouse is sheathed with aluminum marine-style ceiling paneling, aluminum joiner bulkhead panels, and indoor-outdoor carpeting, same as the passenger deck house beneath. The pilot house is air conditioned by the central units that also cool the main deck house.

The below deck arrangements is as follows:

- A. The Forward compartment (Fore Peak) is a void space that is continuous between the port and starboard hull sections. The void is fit with bilge suctions and bilge alarm sensors at each hull. At centerline, the fore peak space is also used to stow the anchor chain / rope (50' of 3/8" chain and 200' of 1.25" nylon rope) which feeds from the raised forward deck and is controlled by an electric vertical anchor windlass-capstan manufactured by Maxwell.
- B. The Second compartments aft P&S are also void tanks. These compartments also have a bilge suctions and a bilge alarms installed. Note that a small 12" diameter electric tunnel bow thruster (reportedly manufactured by VETUS) was originally fit within the starboard hull compartment but has been subsequently removed and the hull openings inserted.
- C. The Third compartments aft P&S are also void tanks. Installed within this compartment are the cooling water pumps for the A/C system. These compartments also have a bilge suctions and a bilge alarms installed.
- D. The Fourth compartment aft P&S is a void space, but outfitted with a hull tank between frames 10 to 12 which is used for the main fuel oil storage. Each fuel storage tank holds approx. 900 gallons. Filling stations for these tanks are located on the main deck and fit with cam-lock style connections. There is a dedicated spill containment built around the fuel oil filling pipe and the fuel oil vent valve. Also located within these void spaces are the small 3/4HP cooling water pumps for the HVAC system and a header tank for the A/C cooling water via channel keel coolers. There are bilge suctions and bilge alarm sensors installed.
- E. The Fifth compartment aft P&S is the main engine room where all major operation equipment is located. Each hull is outfitted with the 640 HP Cummins main engines which are turbo-charged and heat exchanger cooled and fit with standard exhausts. Each motor is also fit with its own engine driven seawater cooling pump. The 3.00" tail shafts are fit with 'dripless style' seals. Within each engine room there is an Izusu 40 Kw generator set which feed a totally enclosed switchboard located within the starboard side engine space. A 100 amp shore-power connection is provided. Battery banks and a battery charger are also installed in the engine room. All main engines and generators are electric start. The engine room is fit with sea suctions and strainers for cooling water, a fuel distribution piping system, bilge suction manifold with an engine driven bilge pump, emergency bilge suction and bilge alarm sensor.
- F. The Sixth compartment aft P&S are a void spaces that is outfitted with two polyethylene tank (100 gallon capacity each) for the collection of the sewage waste water from the toilets and sinks. Two additional polyethylene tanks (100-gallon capacity each) are also installed in this space for the storage of fresh water. Also within this compartment, on the starboard side, is the hydraulic reservoir tank and pumps for the Kobelt steering system.
- G. The Seventh, and aftermost compartment P&S is the steering compartment (Lazarette) where the rudder mechanism is fitted. The steering arrangement as Kobelt and consists of TWO (2) hydraulic cylinders (one mounted at each tiller). It is noted that NO jockey bar is installed to connect the rudders to each other. It appears that this item was modified aboard the vessel sometime after construction. There are bilge suctions and bilge alarm sensors installed.

MACHINERY – ENGINE ROOM:

Equipment shown for both P&S hulls:

1. 2 - Cummins Diesel Main Engines – Model KTA19—M3 – 640HP each at 1800 RPM.
 - a. Port Engine maintenance log = Approx. 8,200 hours
 - b. Starboard Engine maintenance log = Approx. 8,200 hours.
2. 2 – ZF Reverse Reduction Gears for the Main Engines – Model ZF-665A – 1.970 : 1.0
3. 2 – Isuzu Generator Set – Model ML-40-INKD – 40 Kw – 120 / 208 VAC / 60 Hz. / 3 Ph.
 - a. Port Engine local panel = Approx. 20,084 hours
 - b. Stbd. Engine local panel = Approx. 26,289 hours
4. 1 – Main Switchboard with 150 amp main breakers and 100 amp shore power breaker. (STBD. Side only)
5. 2 – ZF Mathers Cruise Command / Control panels for maneuvering
6. 2 – Racor dual fuel filter / separator units for the main engines – Model 751000 MAX – 360 GPH
7. 2 – Racor single fuel filter / separator units for the generators – Model 500 MA – 60 GPH
8. 2 – Electric 5.0 HP x 60 GPM main fire / bilge pumps
9. 2 – Bilge manifold for 7 compartments
10. 4 – Banks of 8-D marine batteries – (Six total batteries)
11. 2 – 24 VDC Battery Charger - 40 amp
12. 4 – Electrical (approx. 1000 CFM) axial ventilation fans

EQUIPMENT – PILOT HOUSE:

1. 1 – SHIP’S WHEEL – Kobelt manual steering helm and reservoir tank
2. 1 – CAPTAIN’S CHAIR
3. 1 – CHART TABLE with miscellaneous storage below
4. 1 – METAL BOOK SHELF with Company and Vessel Manuals & Publications
5. 1 – PORTABLE FILE BOX with Company Forms
6. 2 – CUMMINS MARINE ENGINE CONTROL PANELS w/ Murphy alarms
7. 1 – ZF DUAL CLUTCH & THROTTLE CONTROL
8. 1 – KOBELT Rudder control lever
9. 1 – KOBELT Rudder Angle Indicator – (RAI) & Rudder Order Indicator (ROI)
10. 1 – RITCHIE MAGNETIC COMPASS – Model Power-Damp PLUS (No deviation card sited)
11. 1 – FURUNO RADAR
12. 1 – FURUNO INTEGRATED RADAR / NAVIGATION SYSTEM – Model NavNet vx2
13. 1 – STANDARD HORIZON GPS – Model GPS-Chart CP-300
14. 1 – FURUNO ECHO SOUNDER
15. 1 – FURUNO UNIVERSAL AIS - Model FA-150
16. 1 – COBRA VHF RADIO– Model DSC
17. 1 – UNIDEN VHF RADIO – Model OCEANUS DSC

18. 1 - KENWOOD 2-WAY RADIO TRANSCEIVER
19. 1 – SHAKESPEARE RADIO ANTENNA TESTER
20. 1 – STANDARD HORIZON LOUD HAILER – Model VLH-3000
21. 3 – ELECTRIC WINDSHIELD WIPERS
22. 1 – Window Defroster control
23. 1 – Steering pump control panel
24. 1 - P&S Bilge Alarm panel
25. 1 – Emergency Ventilation shut-down panel
26. 1 – Fire Pump Start / Stop Control panel
27. 1 – Fresh Water transfer pump controls
28. 1 – FloScan Diesel Flow Consumption meter
29. 1 – CARLISLE & FINCH SEACH LIGHT
30. 1 – Anchor Windlass control panel
31. 1 – SHIP’S AIR HORN Control
32. 1 – CINTAS FIRST AID CENTER
33. 1 – ZEE MEDICAL FIRST AID KIT – Model First Responder
34. 1 – ZOLL DEFIBRILLATOR – Model AED-PLUS
35. 1 – MEDICAL OXYGEN CYLINDER & ASSESORIES
36. 4 – ORION HAND FLARES – Model Item # 865
37. 3 – ORION HAND SMOKE FLARES – Model Item # 958
38. 1 – ADULT TYPE I PFD
39. 3 – ADULT TYPE III PFD
40. 1 – PIONEER SAT. READY STEREO RADIO SYSTEM – Model Super Tuner III-D
41. 1 – G.E. MICROWAVE – Model Small Table-top
42. 1 – WHIRLPOOL MINI REFRIGERATOR – Model 3.2 cu. Ft.
43. 1 – 10# ABC DRY-CHEMICAL FIRE EXTINGUISHER – Model Hand-Held
44. 1 – 120 – 240 VAC power panel for vessel systems.
45. 1 – 12 VDC power panel for navigation lighting, emergency lights, navigation electronics
46. 1 – 120 VAC power panel.
47. 1 – SEA-FIRE Manual Activation Panel
48. 1 – Bank of 8-D marine batteries – (Two total batteries)
49. 1 – 12 VDC Battery Charger - 40 amp

EQUIPMENT – SAFETY & FIRE-FIGHTING:

1. 188 – SAFEGARD ADULT TYPE I PFD’s – Model 63
2. 30 – SAFEGARD CHILD TYPE I PFD’s – Model 67
3. 2 – 30” DIA. LIFE RING with rope – USCG approved
4. 2 – 30” DIA. LIFE RING with water light – USCG approved

5. 1 – 30” DIA. LIFE RING – USCG approved
6. 2 – 5.0-HP x 60 GPM main fire pumps in the engine room
7. 3 – FIRE STATION with 1.5” supply valve to 1” rubber hose and combination nozzle
8. 2 – 40# FIXED-FIRE SYSTEMS (one for each engine room) (SEA-FIRE model FM-200 compressed gas)
9. 7 – 10# ABC, USCG Type B-II, Dry Chemical hand-held fire extinguishers

VESSEL CONDITION INSPECTION:

A. UNDERWATER HULL: The underwater hull was fully inspected while in dry-dock at Wilmington Marine Center.

The observations which were noted to the underwater hull are as follows:

1. The propellers shafts and rudders were observed in satisfactory condition.
2. The P&S rudders visually appear to be at the same degree even though they are not jointly connected via a jockey bar.
3. The port bow was noted with a small area of damage at about the 8’ WL.
4. The condition of the remaining sacrificial anodes was about 50% used. The anodes which were attached to the propeller shafts and rudders were in poor condition. Anodes were totally missing in several other locations.
5. The underwater A/F coating was with deterioration.

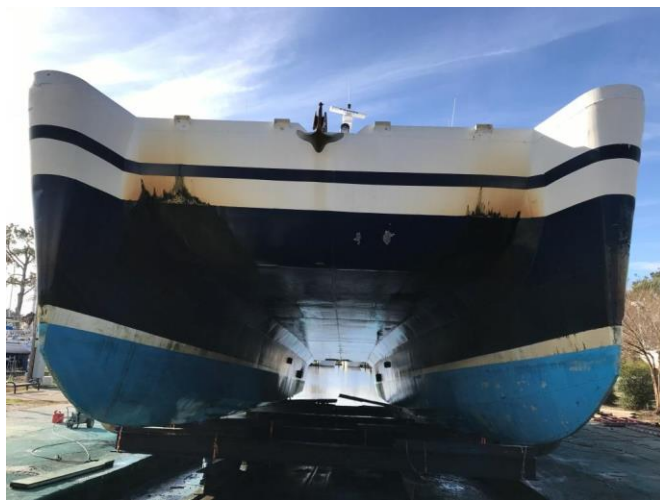


Photo # 1 – Bow View



Photo # 2 – Stern View



Photo # 3 – Starboard side elevation



Photo # 4 – Port side elevation



Photo # 5 – Starboard side tail shaft, prop, and rudder



Photo # 6 – Port side main engine sea chest fouling



Photo # 7 – Port propeller



Photo # 8 – Starboard propeller



Photo # 9 – Port hull inboard side



Photo # 10 – Starboard side main engine exhaust

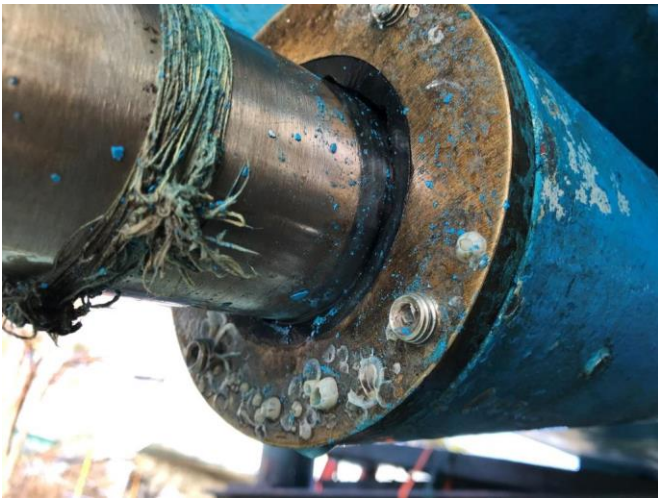


Photo # 11 – Typ. condition of cutlass bearing at stern tube



Photo # 12 – Typical condition of rudder bushing



Photo # 13 – Typ. Condition of cutlass bearing at ‘V-strut’



Photo # 14 – Wasted anode condition on propeller shaft



Photo # 15 – View of port bow damage



Photo # 16 – View of port bow damage from inside the fore peak



Photo # 17 – Bow view arrangement



Photo # 18 – Anchoring arrangement at bow



Photo # 19 – Starboard side main deck house



Photo # 20 – Port side main deck house



Photo # 21 – Man-over-board rescue gear



Photo # 22 – Aft end of deck house with restrooms and ladder to the upper (Bridge) deck



Photo # 23 – Typical restroom



Photo # 24 – Fueling station P&S



Photo # 25- Aft main deck 'Dollie' storage area looking stbd

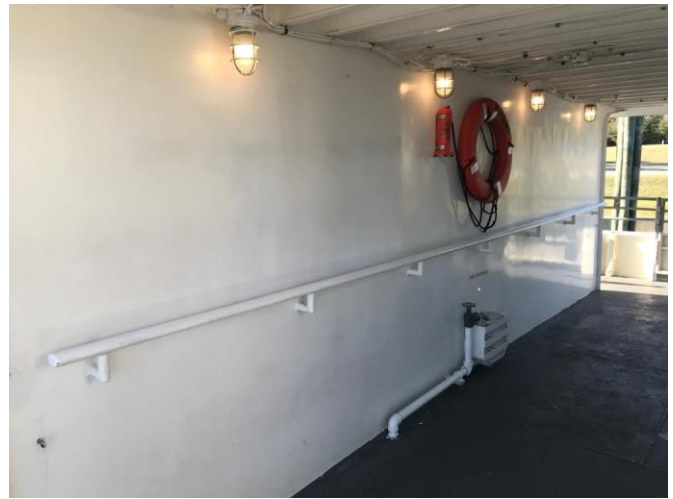


Photo # 26 – Aft main deck passenger boarding area



Photo # 27 – Passenger deck house – looking forward



Photo # 28 – Passenger deck house – looking aft



Photo # 29 – Typical upholstery damage



Photo # 30 – Typical condition of wall coverings



Photo # 31 – Bridge deck seating area – looking aft



Photo # 32 – Bridge deck – looking forward at pilot house



Photo # 33 – Aft bulkhead of pilot house



Photo # 34 – Forward bulkhead of pilot house with visor & windshield wipers



Photo # 35 – Port side bridge deck wing station



Photo # 36 – Starboard side bridge deck wing station



Photo # 37 – Interior pilot house – looking to port



Photo # 38 – Interior pilot house – looking to starboard



Photo # 39 – Interior pilot house – looking aft



Photo # 40 – Helm and control console



Photo # 41 – Cummins engine control panels at helm



Photo # 42 – Port side fore peak compartment



Photo # 43 – View across forepeak to chain locker
& underside of anchor windlass equipment



Photo # 44 – Comp. # 2 – Bilge suction piping and bilge alarm



Photo # 45 – Comp. # 3P – Broken lighting fixture



Photo # 46 – Comp. # 3P - Bilge suction piping & bilge alarm



Photo # 47 – Comp. # 5 – Cummins 640 HP Main Engine



Photo # 48 – Comp. # 5 – Main engine



Photo # 49 – Comp. # 5 – 40 kW Generator Set



Photo # 50 – Comp. # 5 – Tail shaft



Photo # 51 – Comp. # 5 – Main switchboard – (S)



Photo # 52 – Comp. # 5 – Bilge manifold



Photo # 53 – Comp. # 54 – 5.0 HP min fire pump



Photo # 54 – Comp. # 5 – Fixed fire system



Photo # 55 – Comp. # 6P – 2 x 100-gallon sewage & 2 x 100 gallon fresh water tanks



Photo # 56 – Comp. # 6P – Fresh water pressure set



Photo # 57 – Comp. # 6S – Hydraulic steering system & Fresh water pressure set & de-humidifier in the background



Photo # 58 – Comp. # 7P - Steering arrange. at port tiller-head



Photo # 59 – Comp. # 6S – Clad welding repairs to hull



Photo # 60 – Comp. # 3P – Condition of various electrical starters, components, and exposed connections



Photo # 61 – Vessel underway – Bow view



Photo # 62 – Vessel underway – stern view

VESSEL EVALUATION OF CURRENT CONDITION:

Based on this inspection and in the opinion of the undersigned, the general condition and maintenance of the vessel can be rated according to the following schedule:

RATING SCALE (1-10)

- | | |
|-----|-----------------------|
| 1. | New |
| 2. | Excellent Maintenance |
| 3. | Very Good Maintenance |
| 4. | Well Maintained |
| 5. | Average Maintenance |
| 6. | Fair Maintenance |
| 7. | Poor Maintenance |
| 8. | Very Poor Maintenance |
| 9. | No Maintenance |
| 10. | Scrap |

Description/Area	Rating	Comments
Exterior Structure – (Above Main Dk.)	3	(minor damage fwd. on starboard bulwark / rail, & port bow)
Internal Structure (Compartments & Tanks)	4	(various areas of minor corrosion and clad-welding noted)
Manholes and Hatches	3	
Exterior Hull & coatings - (Above WL)	4	
Exterior Hull & coatings – (Below WL)	5	(vessel soon ready for coating re-applications)
Interior Hull & Tank coatings	n/a	(all internal areas are unpainted)
Deck & Deckhouse coatings	4	
Deck Fittings & Machinery	4	(Port wing station manual steering noted out of service)
Vessel Machinery	4	(noted oil in the e/r bilges and around generator sets)
Interior joiner work & linings	7	(Numerous areas of damaged wallpaper in main deck house)
Interior furnishings & carpet	7	(Numerous areas of damaged or worn upholstery)
Piping, sea chests, and valves	4	
Electrical installation & lighting	5	(Several areas of exposed wiring, open, & broken fixtures)
Safety & Fire Equipment	4	(As required for current service route)
Vessel Moorings	3	

VALUATION CONDITIONS:

In addition to the observations noted in this report, the following items are considered by the undersigned to have an effect on determining the current market value for this vessel:

- The vessel was USA built and is USA flagged.
- The vessel age is 16 years.
- The vessel was uniquely and specifically built to suit the design requirements for the current service. This would include the consideration of the required speed, service route, and passenger capacities for the area of operation.
- The vessel has a conventional propulsion arrangement where as many comparable size vessels operate at much high cruising speeds due to having greater HP and applying water-jet propulsion systems.
- The vessel is up to date and maintains all required certification by USCG and remains in active passenger service at her current service location.
- The preventative maintenance program that continues to be used by the current owner /operator contains a verifiable tracking method for the various mechanical systems and maintenance records.

COMPARATIVE VESSELS:

This estimate is prepared using the cost and comparable sales approach to determining the estimated value. Our review included discovery of comparable size, but not comparably equipped (USA & Foreign Flag) aluminum hull vessels as follows:

1.	78' x 26' x 8'	(Pax CAT ferry) - 1998 w/ 2 x MTU 16-2000 – 4200 HP	Asking Price = \$ 295,000
2.	79' x 29' x 8'	(Pax CAT ferry) - 1989 Gladding-Hearn w/ 2 x Deutz – 4000 HP	Asking Price = \$ 795,000
3.	118' x 31' x 12'	(Foreign Pax CAT) - 1990 Norwegian w/ 2x MTU – 4400 HP	Asking Price = \$ 500,000

VALUATION:

With consideration of the above information, it is the expressed opinion of the undersigned, that the current “Fair Market Value” (As Is, Where Is) for this vessel as equipped can be estimated as follows:

- Estimated Fair Market Price as of January 2019 **\$ 975,000 USD.**

This estimated FMV is determined from consideration of the average selling price for closest comparable vessels which are currently offered for sale in similar service, with adjustments to include variations of equipment and the observed conditions noted in this survey. It is our professional opinion that the remaining useful life expectancy for this vessel can be estimated to be 15 (+) years with continued upkeep and maintenance. Note that vessel useful life expectancy is primarily contingent upon management policies and the quality preventative maintenance programs.

DEFINITIONS:

Fair Market Value is an opinion, expressed in terms of money, at which a property would change hands between a willing buyer and a willing seller, neither under any compulsion to buy or sell, and both having reasonable knowledge of relevant facts, as of a specific date.

Remaining Useful Life is the estimated period which a property of certain effective age is expected to be used before it is retired from service.

Terminal or Residual Value in connection with a tangible asset refers to the value of an asset after expiration of its normal useful life, or the value remaining after part of the property's life has been consumed.

No warranty as to the condition, seaworthiness, or marketability of the subject vessel is expressed or implied in anyway whatsoever by this survey report. Neither the Corporation, nor its officers, directors, surveyors, employees, representatives, nor agents, under any circumstances whatsoever, are to be held responsible for any error of judgement, negligence, omissions, misrepresentations, or misstatements in this report. This inspection is conducted and presented in this report without prejudice, or bias, to any of the Parties concerned.

Respectfully submitted,



KOPCO Marine Services, Inc.

Kirk O. Palmquist – INSB-Class Marine Surveyor

CONDITION & VALUATION SURVEY REPORT

82 Feet x 28 Feet x 9.5 Feet

**80 GRT / 55 NRT
Passenger Ferry Vessel**

RANGER



PRINCIPAL: BALD HEAD TRANSPORTATION AUTHORITY
P.O. BOX 3069
BALD HEAD ISLAND, NORTH CAROLINA, 28461

REGISTRY: UNITED STATES OF AMERICA

USA Official No.: 1179424

INSPECTION DATE: November 15, 2018 & January 6, 2019

REPORT DATE: January 30, 2019

GENERAL PARTICULARS

CURRENT REGISTRY:	USA – OFFICIAL # 1179424
CURRENT HOME PORT:	BALD HEAD ISLAND, NORTH CAROLINA
CURRENT CALL SIGN:	WDC-9335
CURRENT OWNERS:	BALD HEAD ISLAND TRANSPORTATION, INC. # 6 MARINA WYND P.O. BOX 3069 BALD HEAD ISLAND, NC 28461 U.S.A.
CURRENT OPERATORS:	SAME
I.M.O. No.:	N/A
PREVIOUS REGISTRY:	N/A
PREVIOUS HOME PORT:	N/A
MMSI #:	367100870
PREVIOUS NAMES:	N/A
BUILT BY:	ISLAND BOATS 5109 EAST OLD SPANISH TRAIL JEANERETTE, LOUISIANA, 70544 U.S.A.
HULL NO.	10064
DATE OF CONSTRUCTION:	2006
DATE KEEL LAID:	October 26, 2004
DATE OF DELIVREY:	March 30, 2006
REGISTERED G.R.T.:	80
REGISTERED N.R.T.:	55
ITC-69 G.R.T.:	123
ITC-69 N.R.T.:	56
TYPE OF SERVICE:	PASSENGER – USCG SUB-CHAPTER ‘T’ & ‘K’
SERVICE AREA:	LAKES, BAYS, & SOUNDS, NOT MORE THAN 1 MILE FROM SHORE
MAX. # OF PAX:	150 – (as a Sub-Chapter T Boat) 229 – (as a Sub-Chapter K Boat) with (22) Dollies 247 – (as a Sub-Chapter K Boat) with (0) Dollies
MAX # OF CREW:	3 + 1 OTHER PERSON IN CREW

L.O.A.:	82 FEET
L. (ART. 2 (8)):	N/A
MOULDED BREADTH:	28.00 FEET
MOULDED DEPTH:	9.20 FEET
MAX. MOULDED DRAFT:	6.90 FEET
DEADWEIGHT:	UNK.
LIGHTSHIP:	60 LT – (Approx.)
FUEL CAPACITY:	2400 Gallons – (Approx.)
FRESH WATER CAPACITY:	600 Gallons – (Approx.)
BLACK WATER CAPACITY:	600 Gallons – (Approx.)
MAIN ENGINES:	2 x CUMMINS – KTA19-M4 – 700 HP @ 2100 RPM
GEAR BOXES:	2 x ZF – BW-665-A – 1.970 : 1.0
AUXILLIARIES:	2 x ISUZU – ML-40-INKD – 208/ 240 VAC - 40 Kw
SERVICE SPEED:	17 Knots (Approx.)
CLASS SOCIETY:	N/A
PREVIOUS DRY-DOCK:	MAY 20, 2016
RECENT DRY-DOCK:	MARCH 01, 2018
NEXT DRY-DOCK:	MARCH 31, 2020

CERTIFICATION:

- | | | |
|---|--------------------|---------------------|
| • USCG CERTIFICATE OF DOCUMENTATION (COD) | ISSUED: 03-24-2018 | EXPIRES: 04-30-2019 |
| • USCG CERTIFICATE OF INSPECTION (COI) | ISSUED: 03-24-2016 | EXPIRES: 03-24-2021 |
| • USCG STABILITY LETTER | ISSUED: 10-04-2011 | EXPIRES: N/A |
| • FCC RADIO STATION LICENSE | ISSUED: 04-30-2018 | EXPIRES: 04-29-2023 |

CONDITION OF INSPECTION:

THIS IS TO CERTIFY that the Passenger Ferry RANGER was inspected by the undersigned Marine Inspector on November 15, 2018 and later in dry dock on January 06, 2019 for the purpose of determining the Condition & Valuation of the vessel. The vessel was in dry dock at Wilmington, North Carolina at the terminal facility of Wilmington Marine Center, 3410 River Road, Wilmington, North Carolina, 28412.

The vessel was prepared for inspection with all hull compartments open, ventilated, and available for inspection.

This Condition and Valuation survey Report was requested by Bald Head Island Transportation Authority and is for their account.

GENERAL VESSEL DESCRIPTION:

The RANGER is a 150 Passenger Catamaran Ferry, built in 2006 by Island Boats, Inc. of Jeanerette, Louisiana. The vessel is inspected by the United States Coast Guard (USCG) under Sub-Chapter T & K rules and regulations, as applicable. The vessel currently maintains a valid COI for operation with a maximum of 150 passengers plus 4 crew members. It is in dedicated ferry service between Southport, North Carolina and Bald Head Island, North Carolina.

The vessel is a catamaran hull of all welded aluminum construction. The bow stems are nearly vertical. The transoms are slightly curved. The vessel has a 1" stem & keel bar on the centerline of each pontoon. It is twin screw with twin spade rudders. The vessel has 3.00" diameter (Aquamet 17) stainless steel propeller shafts supported by a water lubricated cutlass bearing at the hull stern tube exit and then supported by another cutlass bearing at the "v-struts" just in front of the propellers. The propellers are manufactured by Michigan Wheel and are a fixed, 4-blade, NiBral, 36" diameter x 25" pitch. The rudder stocks are 4.50" diameter (Aquamet 17) stainless steel with 5/8" thick rudder blades.

The deck of the vessel has camber, but no sheer. Each hull has a total of SIX (6) hull compartments which are accessed via 24" x 24" flush, cast aluminum lift-out water-tight hatches as manufactured by FREEMAN Marine (Series 2400) on the open deck. The engine room is fit with a 30" x 30" FREEMAN hinged hatch and a large rectangular 'soft patch' for engine removal.

Each hull is longitudinally framed from the stem to the transom. Each hull has FIVE (5) continuous transverse water-tight bulkheads. Frame spacing is 3'-6" throughout. The bottom hull shell plating is 3/8" with 5" x 2" x 1/4" T-bar longitudinal stiffeners. The inboard and outboard side shell plates are 5/16" with 3" x 2" x 1/4" T-bar longitudinal stiffeners. The main deck plating is 1/4" with 2" x 2" x 1/4" T-bar longitudinal stiffeners. Heavy (approximately 1/2") reinforcing double plates are fit in way of the strut supports on the bottom. The P&S side shells have a full-length aluminum rectangular fender at the main deck level.

The vessel is fit with four (8) 6" fabricated single bitts with horns. The bitts are located at the P&S bow, along the P&S mid-body, and P&S at the stern which are for mooring purposes. A single 120# "CLAW" style anchor with a leading 50' section of 1/2" galvanized chain and spliced with 200' of 1.50" soft nylon rope is provided at centerline on the 'raised bow'. The anchor is launched and retrieved via a Maxwell 4000 windlass-capstan combination. A stainless steel roller is fit overhanging the bow on centerline to direct the anchor chain and rope. A combination plate bulwark and pipe handrails are fit completely around the main deck. Passenger 'boarding gates' are built into the P&S bulwarks at two locations P&S along the mid-body. Near to the stern P&S, the bulwark is open for the passage of rolling luggage dollies for storage onto the after deck. Safety netting is installed at these bulwark openings when not in use. Sufficient freeing ports are built into the bulwarks for drainage.

On the starboard side of the vessel is fit a Life-Sling-2 'man-over-board' recovery system and a Forespar manual recovery davit.

The main deckhouse for passengers is accessible through P&S sliding weather-tight doors and a single hinged weather-tight door at the aft bulkhead. The deck house is fit with TWENTY-ONE (21) large marine-style fixed windows on the forward and P&S sides. The aft door leads onto the aft deck to the men's and women's restrooms, the inclined ladder to the upper deck, and the aft boarding station.

The separate restrooms are built into the aft end of the deck house and are ventilated by the HVAC system. The restrooms are fit with a marine light fixture, a marine style toilet, a small rectangular stainless steel wash basin with a 6" faucet (cold & hot water supplied), an individual 110 VAC electric water heater as manufactured by State, a bulkhead mounted soap dispenser, a bulkhead mounted toilet paper holder, a bulkhead mounted electric hand-drier, a stainless steel framed mirror, and a small metal trash can. Inside the restrooms are large panels to access the after air conditioning system for the passenger deck house.

The interior of the passenger deck house is outfitted with pre-fabricates upholstered bench-seating with storage compartments beneath for lifejackets. The bench seating is arranged around Formica-covered tables that can accommodate approximately about SEVENTY-TWO (72) persons comfortably seated. Stowage for a total of 120 adult lifejackets and 18 child lifejackets is provided inside the deck house. The deckhouse is both air-conditioned and heated by 4 self-contained, sea-water cooled HVAC units with heat strips that are manufactured by Flagship Marine. Two 1.5-Ton units are mounted forward and 2 3-Ton units are mounted at the aft end of the deckhouse. Standard fluorescent and emergency lighting is provided. SIX (6) box speakers are installed in overhead of the deck house for announcements and entertainment. The ceiling is covered with aluminum marine-style grid panels as manufactured by Chicago Metallic. The bulkheads are sheathed with aluminum panels which are screwed to the framing. The deck is carpeted with glued-down indoor-outdoor style carpeting.

Across the stern of the main deck is the storage area for the wheeled dollies that are used for transporting passenger luggage and other items. The space provided can accommodate up to TWENTY-TWO (22) dollies at one time. Rubber bumpers are installed around the perimeter of the area for protection of the dollies. All exterior decks are painted and with a non-skid surface treatment.

The pilot house sits atop the bridge deck and is accessed by two inclined ladders from the stern deck. The bridge deck is accessible to passengers and can accommodate a maximum total of NINETY-SEVEN (97) persons. Across the aft end of the pilot house is a fabricated aluminum box that serves as bench seating and lifejacket stowage (62-Adult & 12-Children). On the aft bridge deck there are additional aluminum bench seating and lifejacket stowage boxes for the remainder of lifejackets. The bridge deck is also completely surrounded by a combination of plate bulwark and pipe handrails.

The pilot house is outfitted with a complete steering console, an adjustable captain's chair, a metal chart table with under stowage cabinets and file cabinets. Fixed windows are fit on all sides of the pilot house which provide 360 degree visibility. The FOUR (4) forward facing fixed windows are each fit with 24 VDC windshield wipers with washer as manufactured by

Hepworth. Atop the pilot house are the main mast, radar foundations, the ship's horn, and all radio electronics antenna mountings. The interior of the pilothouse is sheathed with aluminum marine-style ceiling paneling, aluminum joiner bulkhead panels, and indoor-outdoor carpeting, same as the passenger deck house beneath. TWO (2), Coleman-Mach 1-Ton, roof-mounted self-contained air conditioning units are mounted atop the pilot house.

The below deck arrangements is as follows:

- A. The Forward compartment (Fore Peak) is a void space that is continuous between the port and starboard hull sections. The void is fit with bilge suctions and bilge alarm sensors at each hull. At centerline, the fore peak space is also used to stow the anchor chain / rope (50' of 1/2" chain and 200' of 1.50" nylon rope) which feeds from the raised forward deck and is controlled by an electric vertical anchor windlass-capstan manufactured by Maxwell.
- B. The Second compartments aft P&S are also a void tank but have been outfitted with the cooling water intake sea chest and cooling water circulating pump for the accommodation air conditioning system. These compartments also have a bilge suctions and a bilge alarms installed.
- C. The Third compartment aft P&S is a void space, but outfitted with 2 independent tanks, per hull. One large 5' diameter x 9' long welded aluminum tank for fuel storage (approx. 1200 gallons) and, one polyethylene tank (300 gallon capacity) for fresh water. Filling stations for these tanks are located on the main deck and fit with cam-lock style connections. There is a dedicated spill containment built around the fuel oil filling pipe and the fuel oil vent valve. There is a small 1/2 HP fresh water pressure set with 8.5-gallon tank that supply freshwater to the toilets and the restroom basins. There are bilge suctions and bilge alarm sensors installed.
- D. The Fourth compartment aft P&S is the main engine room where all major operation equipment is located. Each hull is outfitted with the 700 HP Cummins main engines which are turbo-charged and heat exchanger cooled and fit with standard exhausts. Each motor is also fit with its own engine driven seawater cooling pump. The 3.00" tail shafts are fit with 'dripless style' seals. Within each engine room there is an Izusu 40 Kw generator set which feed a totally enclosed switchboard located within the port side engine space. A 50 amp shore-power connection is provided. Battery banks and a battery charger are also installed in the engine room. All motors are electric start. The engine room is fit with sea suctions and strainers for cooling water, a fuel distribution piping system, bilge suction manifold with an engine driven bilge pump, emergency bilge suction and bilge alarm sensor.
- E. The Fifth compartment aft P&S is a void space that is outfitted with one polyethylene tank (300 gallon capacity) for the collection of the sewage waste water from the toilets.
- F. The Sixth, and aftermost tank P&S is the steering compartment (Lazarette) where the rudder mechanism is fitted. The steering arrangement as Kobelt and consists of TWO (2) hydraulic cylinders (one mounted at each tiller) that are jointly connected via a jockey bar. There are bilge suctions and bilge alarm sensors installed.

MACHINERY – ENGINE ROOM:

Equipment shown for both P&S hulls:

1. 2 - Cummins Diesel Main Engines – Model KTA19--M4 – 700HP each at 2100 RPM.
 - a. Port Engine maintenance log = Approx. 1831 hours since re-power
 - b. Starboard Engine maintenance log = Approx. 2220 hours since re-power.
2. 2 – ZF Reverse Reduction Gears for the Main Engines – Model ZF-665A – 1.970 : 1.0
3. 2 – Isuzu Generator Set – Model ML-40-INKD – 40 Kw – 208 / 240 VAC / 60 Hz. / 3 Ph.
 - a. Port Engine local panel = Approx. 20,084 hours
 - b. Stbd. Engine local panel = Approx. 18,339 hours
4. 1 – Main Switchboard with 150 amp main breakers and 100 amp shore power breaker. (PORT Side only)
5. 2 – ZF Mathers Cruise Command / Control panels for maneuvering
6. 2 – Racor dual fuel filter / separator units for the main engines – Model 751000 MAX – 360 GPH
7. 2 – Racor single fuel filter / separator units for the generators – Model 500 MA – 60 GPH
8. 2 – Electric 7.5 HP x 60 GPM main fire / bilge pumps
9. 2 – Bilge manifold for 6 compartments
10. 4 – Banks of 8-D marine batteries – (Six total batteries)
11. 2 – 24 VDC Battery Charger - 40 amp
12. 2 – Electric cooling water pumps for Flagship Marine HVAC system
13. 4 – Electric 1100 CFM axial ventilation fans

EQUIPMENT – PILOT HOUSE:

1. 1 – SHIP'S WHEEL – Kobelt steering helm and reservoir tank
2. 1 – CAPTAIN'S CHAIR
3. 1 – CHART TABLE with miscellaneous storage below
4. 1 – METAL BOOK SHELF with Company and Vessel Manuals & Publications
5. 1 – PORTABLE FILE BOX with Company Forms
6. 2 – CUMMINS MARINE ENGINE CONTROL PANELS w/ Murphy alarms
7. 1 – ZF DUAL CLUTCH & THROTTLE CONTROL
8. 1 – KOBELT Rudder control lever
9. 1 – KOBELT Rudder Angle Indicator – (RAI) & Rudder Order Indicator (ROI)
10. 1 – RITCHIE MAGNETIC COMPASS – Model Power-Damp (Expired deviation card)
11. 1 – FURUNO RADAR
12. 1 – FURUNO INTEGRATED RADAR / NAVIGATION SYSTEM – Model NavNet vx2
13. 1 – STANDARD HORIZON GPS – Model GPS-Chart CP-300
14. 1 – FURUNO ECHO SOUNDER
15. 1 – FURUNO UNIVERSAL AIS - Model FA-150
16. 1 – COBRA VHF RADIO– Model DSC

17. 1 – WEST MARINE VHF RADIO – Model VHF-480
18. 1 - KENWOOD 2-WAY RADIO TRANSCEIVER
19. 1 – SHAKESPEARE RADIO ANTENNA TESTER
20. 1 – STANDARD HORIZON LOUD HAILER – Model VLH-3000
21. 5 – HEPWORTH ELECTRIC WINDSHIELD WIPERS with window washer pump controls
22. 2 – MARINE AIR SYSTEMS Window Defroster control
23. 1 – HART SYSTEMS, INC. Tank Tender controls
24. 1 – Steering pump control panel
25. 1 - P&S Bilge Alarm panel
26. 1 – Emergency Ventilation shut-down panel
27. 1 – Fire pump Start / Stop Control panel
28. 1 – CARLISLE & FINCH SEACH LIGHT
29. 1 – SHIP’S AIR HORN Control
30. 1 – CINTAS FIRST AID CENTER
31. 1 – ZEE MEDICAL FIRST AID KIT – Model First Responder
32. 1 – ZOLL DEFIBRILLATOR – Model AED-PLUS
33. 1 – AIRCO HEALTH MEDICAL OXYGEN CYLINDER & ASSESORIES
34. 4 – ORION HAND FLARES – Model Item # 865
35. 3 – ORION HAND SMOKE FLARES – Model Item # 958
36. 1 – ADULT TYPE I PFD
37. 3 – ADULT TYPE III PFD
38. 1 – PIONEER SAT. READY STEREO RADIO SYSTEM – Model Super Tuner III-D
39. 1 – HOLIDAY MICROWAVE – Model Small Table-top
40. 1 – FRIGIDAIRE MINI REFRIGERATOR – Model 3.2 cu. Ft.
41. 1 – 10# ABC DRY-CHEMICAL FIRE EXTINGUISHER – Model Hand-Held
42. 1 – 120 – 240 VAC power panel for vessel systems.
43. 2 – 24 VDC lighting panel for navigation equipment, e-lighting, and control instrumentation.
44. 1 – 12 VDC power panel for navigation lighting
45. 1 – 240 VAC power panel.
46. 1 – SEA-FIRE Manual Activation Panel
47. 2 – Banks of 8-D marine batteries – (Four total batteries)
48. 2 – 12 VDC Battery Charger - 40 amp
49. 1 – 24 VDC Battery Charger – 40 amp

EQUIPMENT – SAFETY & FIRE-FIGHTING:

1. 277 – SAFEGARD ADULT TYPE I PFD’s – Model 63
2. 40 – SAFEGARD CHILD TYPE I PFD’s – Model 67

3. 2 – 30” DIA. LIFE RING with rope – USCG approved
4. 2 – 30” DIA. LIFE RING with water light – USCG approved
5. 1 – 30” DIA. LIFE RING – USCG approved
6. 2 – 7.5-HP x 60 GPM main fire pumps in the engine room
7. 3 – FIRE STATION with 1.5” supply valve to 1” rubber hose and combination nozzle
8. 2 – 40# FIXED-FIRE SYSTEMS (one for each engine room) (SEA-FIRE model FM-200 compressed gas)
9. 7 – 10# ABC, USCG Type B-II, Dry Chemical hand-held fire extinguishers

VESSEL CONDITION INSPECTION:

A. **UNDERWATER HULL:** The underwater hull was fully inspected while in dry-dock at Wilmington Marine Center.

The observations which were noted to the underwater hull are as follows:

1. The starboard propeller was observed with distortion to the edges of four blades.
2. The P&S rudders visually appear to be at slightly different degrees.
3. The starboard hull bow wrap-around flat bar at the 7’ 8” waterline was damaged and torn.
4. The main engine exhausts appear to have reinforcing plates added to the exterior and interior of the hull.
5. The condition of the remaining sacrificial anodes was about 50% used. The anodes which were attached to the propeller shafts and rudders were in poor condition. Anodes were totally missing in serval other locations.
6. All of the sea chest grills and sea suction pipes were heavily fouled.
7. The underwater A/F coating was with deterioration.



Photo # 1 – Bow View



Photo # 2 – Stern View



Photo # 3 – Starboard side elevation



Photo # 4 – Port side elevation



Photo # 5 – Port side tail shaft, prop, and rudder



Photo # 6 – Port side main engine sea chest heavy fouling



Photo # 7 – Port propeller

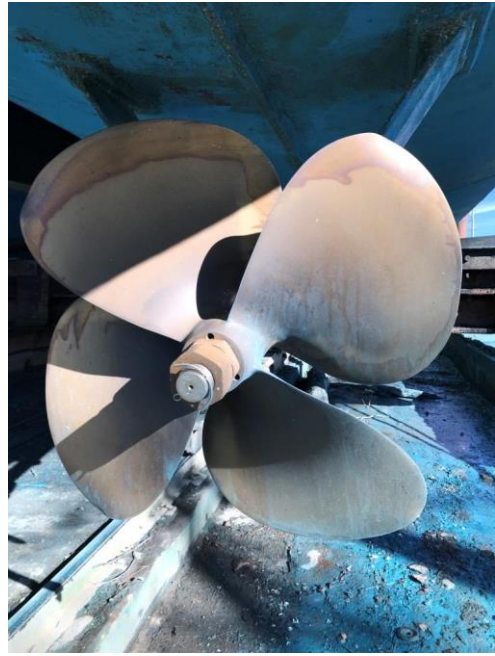


Photo # 8 – Starboard propeller



Photo # 9 – Missing anode on port hull



Photo # 10 – Starboard side main engine exhaust w/
reinforcement ring



Photo # 11 – Typical condition of cutlass bearing at ‘V-strut’



Photo # 12 – Typical condition of rudder bushing



Photo # 13 – Starboard propeller damage



Photo # 14 – Wasted anode condition on propeller shaft



Photo # 15 – View of bow arrangement



Photo # 16 – Bow anchor arrangement



Photo # 17 – Starboard side main deck house



Photo # 18 – Port side main deck house



Photo # 19 – Man-over-board rescue gear

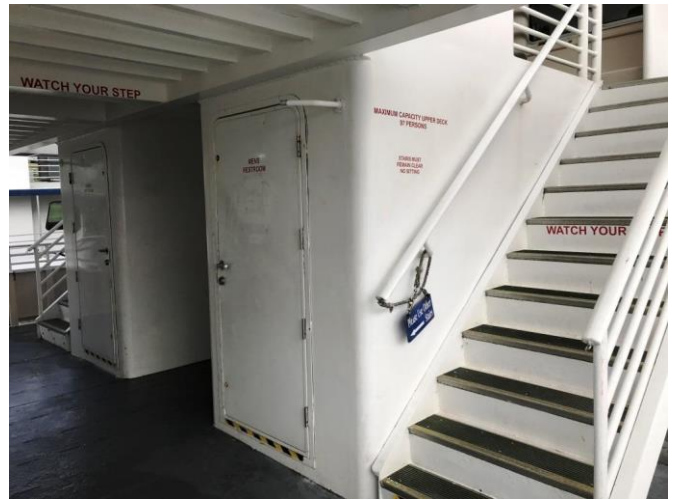


Photo # 20 – Aft end of deck house with restrooms and ladder to the upper (Bridge) deck



Photo # 21 – Typical restroom



Photo # 22 – Sewage pump-out station



Photo # 23- Aft main deck 'Dollie' storage area looking port



Photo # 24 – Aft main deck 'Dollie' storage area looking stbd.



Photo # 25 – Passenger deck house – looking forward



Photo # 26 – Passenger deck house – looking aft



Photo # 27 – Typical upholstery damage



Photo # 28 – Typical condition of carpeting



Photo # 29 – Bridge deck seating area – looking aft



Photo # 30 – Bridge deck – looking forward



Photo # 31 – Aft bulkhead of pilot house



Photo # 32 – Forward bulkhead of pilot house with windshield wipers and wash system



Photo # 33 – Port side bridge deck with wing station and bridge deck fire station



Photo # 34 – (P) Wing steering station with missing throttle control



Photo # 35 – Interior pilot house – looking to port



Photo # 36 – Interior pilot house – looking to starboard

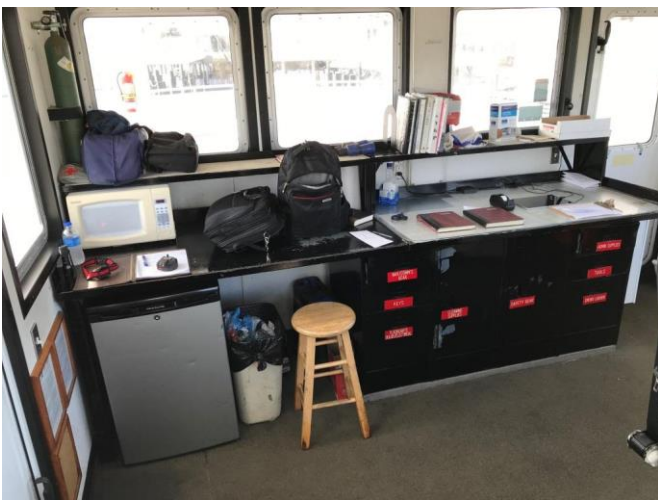


Photo # 37 – Interior pilot house – looking aft



Photo # 38 – Helm and control console

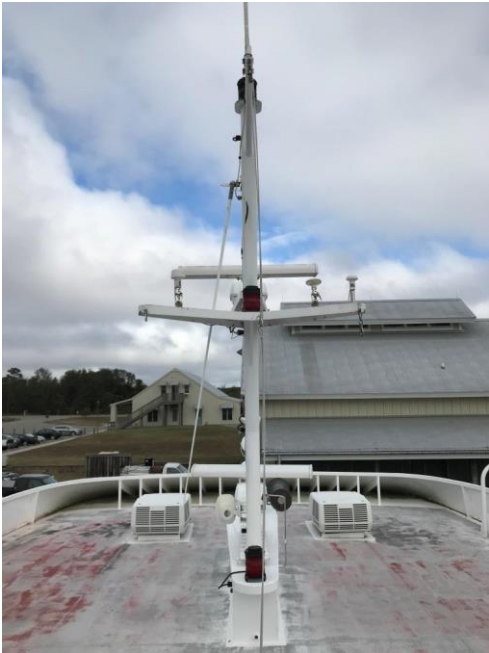


Photo # 39 – Main mast atop the pilot house



Photo # 40 – Starboard fore peak compartment



Photo # 41 – View across forepeak to chain locker and underside of anchor windlass equipment



Photo # 42 – Comp. # 2 – Cooling pump sea chest & pump for fwd. HVAC, bilge suction, and level alarm



Photo # 43 – Comp. # 3 – 300-gallon fresh water tank



Photo # 44 – Comp. # 3 - Main fuel oil storage tank



Photo # 45 – Comp. # 3 – 8.5-gallon fresh water pressure set



Photo # 46 – Comp. # 4 – 700 HP Main engine



Photo # 47 – Comp. # 4 – 40 kW Generator Set



Photo # 48 – Comp. # 4 – Tail shaft and sea chest



Photo # 49 – Comp. # 4 – Main switchboard – (P)



Photo # 50 – Comp. # 4 – Bilge manifold



Photo # 51 – Comp. # 4 – 7.5 HP min fire pump



Photo # 52 – Comp. # 4 – Fixed fire system



Photo # 53 – Comp. # 5 – 300-gallon sewage holding tank



Photo # 54 – Comp. # 5 – Air compressor



Photo # 55 – Comp. # 5 – Hydraulic steering system



Photo # 56 – Comp. # 6 - Steering arrange. at port tiller-head



Photo # 57 – Comp. # 4 – Corrosion at overboard discharge



Photo # 58 – Comp. # 4 – Main engine thru-hull exhaust w/
new welding at hull



Photo # 59 – Vessel underway – Bow view



Photo # 60 – Vessel underway – stern view

VESSEL EVALUATION OF CURRENT CONDITION:

Based on this inspection and in the opinion of the undersigned, the general condition and maintenance of the vessel can be rated according to the following schedule:

RATING SCALE (1-10)

- | | |
|-----|-----------------------|
| 1. | New |
| 2. | Excellent Maintenance |
| 3. | Very Good Maintenance |
| 4. | Well Maintained |
| 5. | Average Maintenance |
| 6. | Fair Maintenance |
| 7. | Poor Maintenance |
| 8. | Very Poor Maintenance |
| 9. | No Maintenance |
| 10. | Scrap |

Description/Area	Rating	Comments
Exterior Structure – (Above Main Dk.)	3	
Internal Structure (Compartments & Tanks)	4	(various areas of minor corrosion noted)
Manholes and Hatches	3	
Exterior Hull & coatings - (Above WL)	4	
Exterior Hull & coatings – (Below WL)	5	(vessel soon ready for coating re-applications)
Interior Hull & Tank coatings	n/a	(all internal areas are unpainted)
Deck & Deckhouse coatings	4	
Deck Fittings & Machinery	4	
Vessel Machinery	4	
Interior joiner work & linings	5	(Primarily in the Pilot house)
Interior furnishings & carpet	7	(Areas of damaged upholstery and carpet very worn & dirty)
Piping, sea chests, and valves	5	(Heavy fouling noted in sea suction piping)
Electrical installation & lighting	4	(As available during inspection)
Safety & Fire Equipment	4	(As required for current service route)
Vessel Moorings	3	

VALUATION CONDITIONS:

In addition to the observations noted in this report, the following items are considered by the undersigned to have an effect on determining the current market value for this vessel:

- The vessel was USA built and is USA flagged.
- The vessel age is 13 years.
- The vessel was uniquely and specifically built to suit the design requirements for the current service. This would include the consideration of the required speed, service route, and passenger capacities for the area of operation.
- The vessel has a conventional propulsion arrangement where as many comparable size vessels operate at much high cruising speeds due to having greater HP and applying water-jet propulsion systems.
- The vessel is up to date and maintains all required certification by USCG and remains in active passenger service at her current service location.
- The preventative maintenance program that continues to be used by the current owner /operator contains a verifiable tracking method for the various mechanical systems and maintenance records.
- The vessel was ‘repowered’ as both main engines (not the gearboxes) were replaced in 2017 with factory re-conditioned motors with standard warranty.

COMPARATIVE VESSELS:

This estimate is prepared using the cost and comparable sales approach to determining the estimated value. Our review included discovery of comparable size, but not comparably equipped (USA & Foreign Flag) aluminum hull vessels as follows:

1. 78’ x 26’ x 8’	(Pax CAT ferry) - 1998 w/ 2 x MTU 16-2000 – 4200 HP	Asking Price = \$ 295,000
2. 79’ x 29’ x 8’	(Pax CAT ferry) - 1989 Gladding-Hearn w/ 2 x Deutz – 4000 HP	Asking Price = \$ 795,000
3. 118’ x 31’ x 12’	(Foreign Pax CAT) - 1990 Norwegian w/ 2x MTU – 4400 HP	Asking Price = \$ 500,000

VALUATION:

With consideration of the above information, it is the expressed opinion of the undersigned, that the current “Fair Market Value” (As Is, Where Is) for this vessel as equipped can be estimated as follows:

- Estimated Fair Market Price as of January 2019 **\$ 1,200,000 USD.**

This estimated FMV is determined from consideration of the average selling price for closest comparable vessels which are currently offered for sale in similar service, with adjustments to include variations of equipment and the observed conditions noted in this survey. It is our professional opinion that the remaining useful life expectancy for this vessel can be estimated to

be 20 (+) years with continued upkeep and maintenance. Note that vessel useful life expectancy is primarily contingent upon management policies and the quality preventative maintenance programs.

DEFINITIONS:

Fair Market Value is an opinion, expressed in terms of money, at which a property would change hands between a willing buyer and a willing seller, neither under any compulsion to buy or sell, and both having reasonable knowledge of relevant facts, as of a specific date.

Remaining Useful Life is the estimated period which a property of certain effective age is expected to be used before it is retired from service.

Terminal or Residual Value in connection with a tangible asset refers to the value of an asset after expiration of its normal useful life, or the value remaining after part of the property's life has been consumed.

No warranty as to the condition, seaworthiness, or marketability of the subject vessel is expressed or implied in anyway whatsoever by this survey report. Neither the Corporation, nor its officers, directors, surveyors, employees, representatives, nor agents, under any circumstances whatsoever, are to be held responsible for any error of judgement, negligence, omissions, misrepresentations, or misstatements in this report. This inspection is conducted and presented in this report without prejudice, or bias, to any of the Parties concerned.

Respectfully submitted,



KOPCO Marine Services, Inc.

Kirk O. Palmquist – INSB-Class Marine Surveyor

CONDITION & VALUATION SURVEY REPORT

72 Feet x 22.50 Feet x 8.67 Feet

**93 GRT / 63 NRT
Passenger Vessel**

SANS SOUCI



PRINCIPAL:

**BALD HEAD TRANSPORTATION AUTHORITY
P.O. BOX 3069
BALD HEAD ISLAND, NORTH CAROLINA, 28461**

REGISTRY:

UNITED STATES OF AMERICA

USA Official No.:

916323

INSPECTION DATE:

November 16 & 17, 2018

REPORT DATE:

December 7, 2018

GENERAL PARTICULARS

CURRENT REGISTRY:	USA – OFFICIAL # 573124
CURRENT HOME PORT:	BALD HEAD ISLAND, NORTH CAROLINA
CURRENT CALL SIGN:	WBB-5017
CURRENT OWNERS:	BALD HEAD ISLAND TRANSPORTATION CHANDLER BUILDING – P.O. BOX 3069 BALD HEAD ISLAND, NC 28461 U.S.A.
CURRENT OPERATORS:	BALD HEAD ISLAND TRANSPORTATION 6099 INDIGO PLANTATION DR. P.O. BOX 3069 BALD HEAD ISLAND, NC 28461 U.S.A.
I.M.O. No.:	N/A
PREVIOUS REGISTRY:	USA
PREVIOUS HOME PORT:	UNK.
MMSI #:	367144530
PREVIOUS NAMES:	SPIRIT OF 76
BUILT BY:	LAFCO BOAT BUILDERS, INC. 654 E. KALISTE SALOOM RD. LAFAYETTE, LOUISIANA, 70508 U.S.A.
HULL NO.	1270
DATE OF CONSTRUCTION:	1976
REGISTERED G.R.T.:	93
REGISTERED N.R.T.:	63
ITC-69 G.R.T.:	N/A
ITC-69 N.R.T.:	N/A
TYPE OF SERVICE:	PASSENGER – USCG SUB-CHAPTER ‘T’
SERVICE AREA:	ATLANTIC, INTRACOASTAL WATERWAYS, NOT MORE THAN (1) MILE FROM SHORE
MAX. # OF PAX:	150
MAX # OF CREW:	4

L.O.A.:	72.00 FEET
L. (ART. 2 (8)):	N/A
MOULDED BREADTH:	22.50 FEET
MOULDED DEPTH:	8.67 FEET
MOULDED DRAFT (APPROX):	5.00 FEET – (Abt.)
DEADWEIGHT:	UNK.
LIGHTSHIP:	UNK.
FUEL CAPACITY:	2000 Gallons – (Approx.)
FRESH WATER CAPACITY:	250 Gallons – (Approx.)
BLACK WATER CAPACITY:	2 x 375 Gallons – (Approx.)
MAIN ENGINES:	2 x CUMMINS – KTA 19A-M3 – 640 HP @ 1800 RPM
AUXILLIARIES:	1 x NORTHERN LIGHTS – M944W3F - 30 Kw
SERVICE SPEED:	15 Knots (Approx.)
CLASS SOCIETY:	N/A
PRIOR DRY-DOCK:	JUNE 19, 2015
LAST DRY-DOCK:	MARCH 28, 2017
NEXT DRY-DOCK:	MARCH 31, 2019

CERTIFICATION:

- | | | |
|---|--------------------|---------------------|
| • USCG CERTIFICATE OF DOCUMENTATION (COD) | ISSUED: 10-16-2018 | EXPIRES: 11-30-2019 |
| • USCG CERTIFICATE OF INSPECTION (COI) | ISSUED: 04-25-2017 | EXPIRES: 04-25-2022 |
| • USCG STABILITY LETTER | ISSUED: 05-01-2012 | EXPIRES: N/A |
| • FCC RADIO STATION LICENSE | ISSUED: 08-19-2016 | EXPIRES: 10-10-2026 |
| • FCC RADIOTELEPHONY CERTIFICATE | ISSUED: 04-30-2018 | EXPIRES: 04-29-2023 |

CONDITION OF INSPECTION:

THIS IS TO CERTIFY that the Passenger Vessel SANS SOUCI was inspected by the undersigned Marine Inspector on November 16 & 17, 2018 for the purpose of determining the Condition & Valuation of the vessel. The vessel was afloat dockside at the Bald Head Island Ferry Terminals, 1301 Ferry Road SE, Southport, North Carolina, 28461 on the 16th, and in dry dock at Wilmington, North Carolina at the terminal facility of Wilmington Marine Center, 3410 River Road, Wilmington, North Carolina, 28412 on the 17th. The vessel was purposely hauled out of the water for this condition survey.

The vessel was prepared for inspection with all hull compartments open, ventilated, and available for inspection.

This Condition and Valuation survey Report was requested by Bald Head Island Transportation Authority and is for their account.

GENERAL VESSEL DESCRIPTION:

The SAN SOUCIE is a small Passenger Ferry, built in 1976 by LAFCO Boat Builders, Inc. of Lafayette, Louisiana. The vessel is inspected by the United States Coast Guard (USCG) under Sub-Chapter T rules and regulations. The vessel currently maintains a valid COI for operation with a maximum of 150 passengers plus 4 crew members. It is in dedicated ferry service between Southport, North Carolina and Bald Head Island, North Carolina.

The vessel is a 'shallow-vee' displacement hull with a single chine and is of all welded aluminum construction. The bow stem is curved to appointed bow. The transom is slightly curved. There are no skegs. The vessel is twin screw with twin spade rudders. The vessel has 3.00" diameter propeller shafts supported by water lubricated cutlass bearings that exit thru the hull stern tube and then are supported by another set of cutlass bearings at the "v-struts" just in front of the propellers. There is a prop tunnel over the P&S propellers and rudders. The props are manufactured by ZF and are fixed, 4-blade, NiBral, of 34" diameter. The deck of the vessel has forward sheer, and rounded deck camber. The vessel has a total of five (8) hull compartments which are accessible by 15" x 24", flush water-tight, built-in 'T-Handle', (or center-bolt), strong-back type aluminum hatches on the open deck, or by 'non-watertight' deck plates within the deckhouse.

The hull is longitudinally framed throughout. The vessel has five (5) continuous transverse water-tight bulkheads. Frame spacing is approximately 4'-0" throughout. The bottom hull shell plating is reported to be 3/8". A heavy (approximately 1/2") plate doubler is fit in way of the P&S stern tube penetration on the bottom. The vessel has a full-length rectangular aluminum fender at the main deck level and additional rub-bar fenders at the stern corners.

The vessel is fit with three (3) 4" diameter fabricated double bitts. There is one on centerline at the bow along with 4 open chocks mounted atop the bulwark to lead ropes over the side. There are two double bitts, P&S near the stern, for mooring purposes. The double bitt on centerline forward is also used for securing the anchor. A rope storage locker is built into the bow's bulwark and is used for stowage the anchor rope. A single "delta" style anchor with a leading section of 1/2" chain and

¾” soft rope is provided which is manually launched overboard. A small electric capstan manufactured by Ideal Windlass is mounted at the bow to assist with mooring and anchoring operations.

A combination plate bulwark with pipe handrails atop it are fit completely around the main deck. Freeing-ports of sufficient size are cut into the bulwark. P&S Fire Stations are mounted along the exterior of the main deck house.

There is a single main deckhouse for passengers, which is outfitted with six (6) upholstered bench-seating areas constructed of plywood that can accommodate approximately 48 persons comfortably seated. The bench seating also provides storage for life jackets. The deckhouse is accessible through a weather-tight door at the stern bulkhead and another weather-tight door at starboard side near to the forward end. Passenger boarding stations are located in the bulwarks near to the aft deckhouse bulkhead. The men’s and woman’s restrooms are located inside the deckhouse near to the forward end. Each restroom is fit with a marine light fixture, a marine style toilet, a small stainless-steel hand-basin with a single push-type faucet (cold water only), a mirror, a bulkhead mounted soap and towel dispenser, a bulkhead mounted toilet paper holder, and a small plastic trash can.

At the very forward end of the deckhouse (and recessed into the main deck is a crew space which once was a galley area when in service by the original owners of the vessel. All the previous galley equipment and services have been removed, or terminated below deck. Within this crew area is the non-tight access hatch to the # 2 compartment (void space), which is directly aft of the forepeak.

At the forward end of the passenger seating area is a built-in wood and Formica service counter area which is assumed to have been the food serving counter-area when originally built. A single sink is installed in the counter, but is no longer in service. Behind the service counter is the doorway that leads up to the pilothouse, the HVAC control thermostat, and the emergency shut-down for the engine room ventilation fan.

Near to the middle of the deckhouse is another non-tight deck access hatch to the # 3 compartment (void space) in which the independent sewage holding tanks are mounted and a small air compressor.

Large fixed-pane windows are fit P&S in the bulkheads of the deckhouse that provide visibility. There are various Formica-covered wood cabinets and under bench cabinets for stowage for 51 adult life jackets and 27 child life jackets. The deckhouse is both air-conditioned and heated by a single central HVAC unit that is mounted on the bridge deck above. Standard fluorescent and emergency lighting is provided. A built-in SONY speaker system is installed in all public areas to provide for announcements. The ceiling is covered with marine-style panels that are secured in position by screws with decorative covers. The deck is carpeted with indoor-outdoor style carpeting. The bulkheads and the starboard access door are sheathed with wood paneling. Wallpaper is applied to the aft bulkhead. Wood trim is fit around each window.

The pilot house sits atop the bridge deck and is accessed by the doorway from the inside passenger seating area and P&S bridge-wing weathertight doors. Vertical ladders are fit P&S from the main deck to access the pilothouse bridge-wings. There is an exterior steering station on the starboard bridge-wing. The single, GOODMAN HVAC (Model GPH1436M41AB) package roof-top central air conditioning unit (3-ton size) is mounted on centerline, directly behind the pilothouse. The unit is

about 1 ½ - years old. The forward bridge deck is chained-off from the public, but is accessible to passengers via an exterior stairway at the aft end of the main deckhouse. The bridge deck can accommodate a maximum total of 76 persons (according to the current COI). The passenger area of the bridge deck has a series of four (4) fabricated aluminum boxes that serve as seating and lifejacket stowage. At this level there are a total of 104 adult lifejackets and 13 child lifejackets. The bridge deck is also completely surrounded by a combination of solid plate and pipe handrails forward around the pilothouse, and a 6-course handrail aft in the public areas. Some bench seating is incorporated into the aft handrails.

The pilot house is outfitted with a complete steering console fabricated out of aluminum supports and covered with wood and Formica, a swiveling captain's chair, a chart table, and a bench seat with under stowage. Fixed windows are fit on all sides of the pilot house which provide 360 degree visibility. Atop the pilot house are the main mast, radar foundations, the ship's horn, dual spot lights, and all radio electronics antenna mountings. The interior of the pilothouse is sheathed with wood paneling similar to the passenger deckhouse. The deck is carpeted is also indoor-outdoor style.

The below deck arrangements is as follows:

- A. The Fore Peak (Frame FP – 5) is a void space that is fit with a bilge suction and bilge alarm sensor.
- B. The Second compartment aft (Frame 5 – 9) is a void tank which is also fit with bilge suction and a bilge alarm. Piping services for the toilet spaces run inside this compartment as well as the terminated system piping for the de-commissioned galley.
- C. The Third compartment aft (Frame 9 -13) is a void tank, but outfitted with 2 independent tanks. There are two (2) polyethylene sewage holding tanks (approx. 375 gallons each) secured inside the void which collect the discharge from the 2 toilet spaces. The discharging station for these tanks are located on the main deck, port side and fit with valves and cam-lock style connections. There is a small 30-gallon air compressor installed within this compartment to provide service air aboard the vessel. The unit is manufactured by 'Speedaire', model # 43234D.. There is a bilge suction and bilge alarm sensor installed.
- D. The Fourth compartment aft (Frame 13 – 19) is the main engine room where all major operation equipment is located. The twin Cummins main engines are turbo-charged and heat exchanger cooled and fit with underwater exhausts. Each motor is fit with its own engine driven seawater cooling pump. The 2.50" tail shafts are fit with 'dripless style' seals. There is a single Northern-Lights 30 Kw generator sets in the engine room which feed a totally enclosed switchboard. A shore-power connection is provided. There is a 32 VDC battery banks and a battery charging system installed in the engine room which provides main motor starting, hull compartment lighting, salt-water toilet pumps, potable water pump, and the bow capstan. All diesel motors are set-up for electric start. The engine room is fit with sea suctions and strainers for cooling water and fire pump. Within the engine room is also installed a fuel distribution piping system, a bilge suction manifold with an engine driven bilge pump, emergency bilge suction and bilge alarm sensor, and a small freshwater pressure set.
- E. The Fifth compartment (Frame 19 – 22) which is immediately aft of the engine room bulkhead is comprised of three (3) transverse compartments. The outboard compartments are void spaces which in which are located the exhaust muffler systems for the main engines and the single generator set. The centerline compartment was originally the main fuel oil bunker tank but was later converted into a void space with an independent fabricated aluminum fuel oil storage tank of approximately 2000 gallons.

F. The Sixth compartment (Frame 22 to Transom) is the steering compartment (Lazarette) is where the rudder mechanism is fitted. The steering arrangement as supplied by 'ZF' and consists of a single hydraulic cylinders (mounted at starboard side tiller) that is connected via a jockey bar to the port side tiller-head. Also within this compartment is located the independent storage tank for the fresh water system of approximately 250 gallons. The main engine and generator exhaust pipes also run through this compartment and exit directly through the transom, below the waterline. There is a bilge suction and bilge alarm sensor installed.

MACHINERY – ENGINE ROOM:

1. 2 - Cummins Diesel Main Engines – Model KTA19-M3 – 640 HP each at 1800 RPM.
 - a. Port Engine maintenance log = Approx. 450 hours since re-powered with factory re-conditioned motor
 - b. Starboard Engine maintenance log = Approx. 450 hours since re-powered with factory re-conditioned motor
2. 2 – ZF Reverse Reduction Gears for the Main Engines – Model ZF-665A – 2.00 : 1.0 ratio
3. 1 – Northern Lights Electrical Generator – Model M944W3F – 30 Kw – 120-208 VAC / 60 Hz. / 3 Ph.
 - a. Engine maintenance log = Approx. 450 hours
4. 2 – Cummins Marine control panels for main engines
5. 2 – ZF Mathers control panels for steering
6. 2 – Racor dual fuel filter / separator units for the main engines – Model 751000 FHX – 360 GPH
7. 1 – Racor single fuel filter / separator units for the generator – Model 500 MA – 60 GPH
8. 1 – Electric driven centrifugal fire pump – 2” x 1.50” – 1.5 HP
9. 1 – Bilge manifold for 8 compartments
10. 2 – Electric driven Sting Ray salt-water supply pumps for the toilets
11. 1 – Electric driven fresh water pump
12. 2 – Banks of 8-D marine batteries (8 total)
13. 1 – LaMarche Battery Charger -

EQUIPMENT – PILOT HOUSE:

1. 1 – SHIP’S WHEEL – Hynautic steering helm and reservoir tank
2. 1 – CAPTAIN’S CHAIR
3. 1 – CHART TABLE
4. 1 – SETTEE with miscellaneous storage below
5. 1 – WOOD BOOK CASE with Company and Vessel Manuals & Publications
6. 1 – PORTABLE FILE BOX with Company Forms
7. 2 – CUMMINS MARINE ENGINE CONTROL PANELS w/ engine alarms
8. 1 – ZF DUAL LEVER CLUTCH & THROTTLE CONTROL
9. 1 – RICHIE MAGNETIC COMPASS
10. 1 – FURUNO RADAR
11. 1 – FURUNO INTEGRATED RADAR NAVIGATION SYSTEM – Model NavNet vx2

12. 1 – STANDARD HORIZON GPS-Chart – Model CP-300
13. 1 – DATA-MARINE ECHO SOUNDER – Model – LX-201 w/ 4' & 8' alarm
14. 1 – FURUNO UNIVERSAL AIS - Model FA-150
15. 1 – WEST MARINE VHF – Model VHF-480
16. 1 – ICOM DSC VHF – Model IC-M-422
17. 1 – STANDARD HORIZON LOUD HAILER – Model VLH-3000
18. 1 – RARITAN TANK MONITOR SYSTEM for High Bilge Level – (4 station)
19. 1 - ELECTRIC WINDSHIELD WIPER
20. 2 – CARLISLE & FINCH SEACH LIGHTS
21. 1 – SHIP'S HORN
22. 1 – NETGEAR Modem
23. 1 – CINTAS FIRST AID CENTER
24. 1 – MEDICAL FIRST AID KIT – Model West Marine EZ-5.0
25. 1 – ZOLL DEFIBRILLATOR – Model AED-PLUS
26. 4 – ORION HAND FLARES – Model Item # 865
27. 3 – ORION HAND SMOKE FLARES – Model Item # 958
28. 2 – SAFEGARD ADULT TYPE I PFD
29. 3 – SAFETY WORK VESTS
30. 1 – ZENITH PORTABLE STEREO AM/FM CLOCK RADIO SYSTEM
31. 1 – Household box fan
32. 1 – 5# Size B-II Portable DRY-CHEMICAL FIRE EXTINGUISHER
33. 1 – 12 VDC power panel for vessel navigation lighting, 2nd. Radar, bilge alarms, and radio electronic systems.
34. 1 – 32VDC lighting panel for various compartment lighting, radar, radio, and compass lighting.
35. 2 – 110 VAC power panel for the lighting and receptacle systems.

EQUIPMENT – CREW LOUNGE:

36. 2 – APRIA HEALTH MEDICAL OXYGEN CYLINDERS & ACCESSORIES
37. 1 – GOLD-STAR MICROWAVE – Model Small Table-top
38. 1 – FRIGIDAIRE MINI REFRIGERATOR – Model 3.2 cu. Ft.
39. 1 – Household box fan
40. 1 – Folding Table
41. 1 – Plastic garbage can
42. 1 – Hand-operated bilge pump
43. 1 – Spherical boat fender
44. 1 – Variety of general stores

EQUIPMENT – SAFETY & FIRE-FIGHTING:

1. 158 – STEARNS ADULT TYPE I PFD's
2. 40 – STEARNS CHILD TYPE I PFD's
3. 1 – 30" DIA. LIFE RING with rope – USCG approved
4. 1 – 30" DIA. LIFE RING with water light – USCG approved
5. 1 – 30" DIA. LIFE RING – USCG approved
6. 2 – FIRE STATIONS with 1 ½" supply valve to 1 ½" canvas covered rubber fire hose and combination nozzle
7. 1 – 5# ABC, USCG Type B-II, Dry Chemical hand-held fire extinguishers
8. 2 – 10# ABC, USCG Type B-II, Dry Chemical hand-held fire extinguishers
9. 2 – 20# ABC, USCG Type B-III, Dry Chemical hand-held fire extinguishers

VESSEL CONDITION INSPECTION:

A. UNDERWATER HULL:

The underwater hull was fully inspected while in dry-dock at Wilmington Marine Center. The vessel hauled at this location for the specific purpose of inspection for this survey report. The following observations were noted:

1. A deep scrape in the paint coatings and apparent scrape into the bottom hull plate was observed along the port bow approximately 3 feet above the line of the keel and about 8 feet long, in way of the Fore Peak and adjacent Void Compartments.
2. Various areas of paint coating failures on the underwater hull.
3. Heavy marine growth and fouling on the intake for the main engine sea-chest and other sea-chests.
4. Marine growth on the prop-shafts and significant deterioration of the shaft anodes.
5. Fish line entanglement on the starboard shaft at the stern tube bearing.
6. Looseness in the rudder linkage as noticed by hand moving the rudders.
7. A very slight 'ding' in the tip of the starboard propeller blades.
8. 'Pitting' on the port side rudder shaft and the inboard side of the rudder blade w/ deterioration of the rudder anodes.

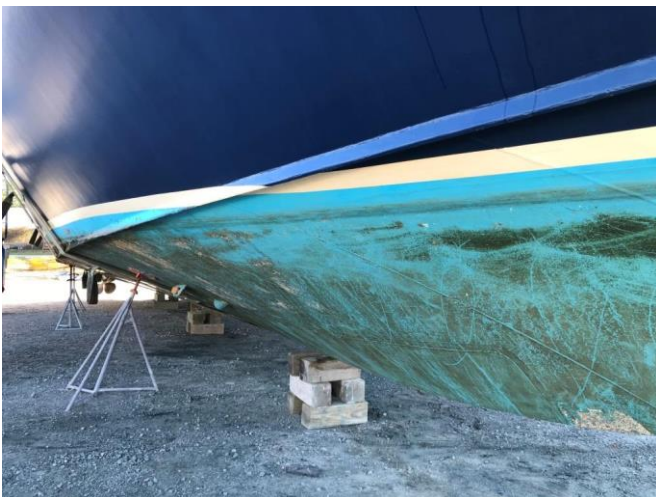


Photo # 1 – Starboard side bow hull looking aft



Photo # 2 – Bow hull (port side) with scrape indentation



Photo # 3 – Starboard side bottom hull looking aft



Photo # 4 – Port side bottom hull looking aft



Photo # 5 – Starboard tail shaft, prop, and rudder



Photo # 6 – Starboard Propeller



Photo # 7 – Port propeller



Photo # 8 – Port side rudder with 'pitting'



Photo # 9 – Main sea chest intake screen with heavy fouling



Photo # 10 – Port side tail shaft at stern tube



Photo # 11 – Starboard bow profile



Photo # 12 – Port bow profile



Photo # 13 – Stern View



Photo # 14 – Port side elevation view

B. MAIN DECK:



Photo # 15 – Bow Deck



Photo # 16 – Deck house forward bulkhead



Photo # 17 – Port side deck house looking forward

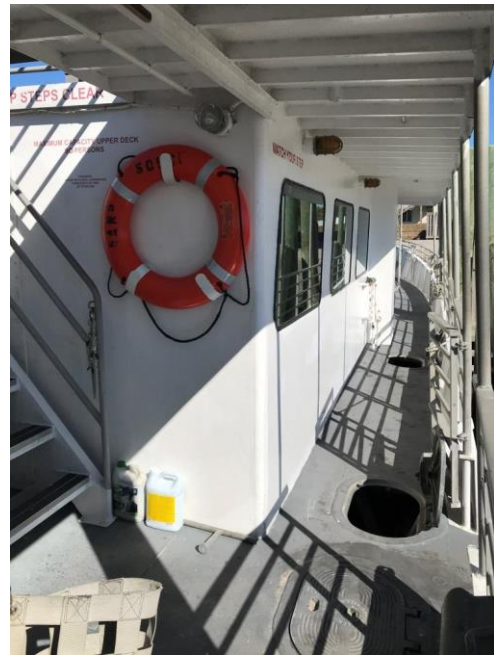


Photo # 18 – Starboard side deck house looking fwd.



Photo # 19 – Aft deck looking to port



Photo # 20 – Aft deck



Photo # 21 – Bridge deck looking forward



Photo # 22 – Bridge deck looking aft w/ life jacket boxes

C. INTERIOR PILOT HOUSE:



Photo # 23- Pilot house – forward view



Photo # 24 – Pilot house chart table – aft view



Photo # 25 – Aft steering station



Photo # 26 – Pilot house roof and main mast

D. INTERIOR DECK HOUSE:



Photo # 27 – Main deck house – looking aft



Photo # 28 – Main deck house – looking forward



Photo # 29 – Main deck house – service counter



Photo # 30 – Main deck house – life jacket stowage



Photo # 31 – Forward crew lounge



Photo # 32 – Access to hull compartment # 2

E. BELOW DECK HULL COMPARTMENTS:

All hull compartments were inspected and found to be basically sound and without any noticed structural, welding defects, indents, or material distortions. All hull compartments are normally dry 'Void compartments.' Each compartment was observed to have average condition in regards to galvanic oxidation of the metal surfaces. It was noted that in Compartment # 3 there were noted areas of previous 'Clad-Welding' of pits on the bottom hull plates near to the keel. All hull compartments are fit with bilge level sensor alarms and bilge suction according to the regulations.



Photo # 33 – Fore peak compartment – looking fwd.



Photo # 34 – Fore peak bilge suction



Photo # 35 – Fore peak deck insert with missing structure



Photo # 36 – Compt. # 2 looking down from manhole



Photo # 37 – Comp. # 3 – Sewage holding tanks



Photo # 38 – Comp. # 3 – bilge alarm, suction, & transducer



Photo # 39 – Comp. # 3 – Sewage tanks and air compressor



Photo # 40 – Comp. # 3 – clad welding on bottom hull



Photo # 41 – Comp. # 4 – Port side main engine – 640 HP



Photo # 42 – Comp. # 4 – Stbd. side main engine – 640 HP



Photo # 43 – Comp. # 4 – Single gen/set – 30 kW



Photo # 44 – Comp. # 4 – Port propeller shaft



Photo # 45 – Comp. # 4 – Bilge manifold



Photo # 46 – Comp. # 4 – M/E sea chests and strainers



Photo # 47 – Comp. # 5 – Port side M/E exhaust muffler



Photo # 48 – Comp. # 6 - Port tiller-head and engine exhaust



Photo # 49 – Comp. # 6 – Steering room looking to port



Photo # 50 – Comp. # 6 – Fresh water storage tank

VESSEL EVALUATION OF CURRENT CONDITION:

Based on this inspection and in the opinion of the undersigned, the general condition and maintenance of the vessel can be rated according to the following schedule:

RATING SCALE (1-10)

- | | |
|----|-----------------------|
| 1. | New |
| 2. | Excellent Maintenance |
| 3. | Very Good Maintenance |
| 4. | Well Maintained |
| 5. | Average Maintenance |
| 6. | Fair Maintenance |

7.	Poor Maintenance
8.	Very Poor Maintenance
9.	No Maintenance
10.	Scrap

Description/Area	Rating	Comments
Exterior Structure – (Above Main Dk.)	4	
Internal Structure (Compartments & Tanks)	4	(As available during inspection)
Manholes and Hatches	4	
Exterior Hull & coatings - (Above WL)	4	
Exterior Hull & coatings – (Below WL)	7	(Recommend to address at next dry-docking)
Interior Hull & Tank coatings	n/a	
Deck & Deckhouse coatings	6	
Deck Fittings & Machinery	4	
Vessel Machinery	3	
Interior joiner work & linings	6	(A few sections need to be repaired)
Interior furnishings & carpet	6	(Main deck house & Pilot house)
Piping, sea chests, and valves	4	(Recommend to address at next dry-docking)
Electrical installation & lighting	5	(As available during inspection)
Safety & Fire Equipment	5	(As required for current service route)
Vessel Moorings	3	

VALUATION CONDITIONS:

In addition to the observations noted in this report, the following items are considered by the undersigned to have an effect on determining the current market value for this vessel:

- The vessel was USA built and is USA flagged.
- The vessel age is 42 years.
- The vessel is up to date and maintains all required certification by USCG and remains in active passenger service at her current service location.
- The vessel is required to be dry-docked for USCG inspection in less than 4 months (latest date 03-31-2019).
- The preventative maintenance program that continues to be used by the current owner /operator contains a verifiable tracking method for the various mechanical systems and maintenance records.
- The vessel was technically ‘repowered’ as both main engines (not the gearboxes) were recently replaced with factory re-conditioned motors with standard warranty.
- The single auxiliary gen/set was recent replaced with a new Northern Lights 30 kW unit.

COMPARATIVE VESSELS:

This estimate is prepared using the cost and comparable sales approach to determining the estimated value. Our review included discovery of comparable size (USA Flag) aluminum hull vessels as follows:

1.	65' x 16' x 7'	(Pax vessel) - 1968 Gulf Craft w/ 2 x GM 12v71 – 800 HP	Asking Price = \$ 168,900
2.	65' x 21' x 8'	(Pax vessel.) - 1975 Gulf Craft w/ 2 x John Deere – HP (unk.)	Asking Price = \$ 295,000
3.	65' x 17' x 8'	(Crew Boat) - 1971 Breaux w/ 2x GM 12v71 – 950 HP	Asking Price = \$ 300,000
4.	70' x 17' x 8'	(Crew Boat) - 1971 Breaux w/ 2 x GM 12v71 – 950 HP	Asking Price = \$ 250,000
5.	75' x 20' x 8'	(Pax vessel) – 1973 Depend-A-Craft w/ 2 x GM 12v71 – 1050HP	Asking Price = \$ 425,000
6.	85' x 20' x 8'	(Pax vessel) – 1974 Gulf Craft w/ 2 x GM 12v71 – 1100 HP	Asking Price = \$ 699,000

VALUATION:

With consideration of the above information, it is the expressed opinion of the undersigned, that the current “Fair Market Value” (As Is, Where Is) (prior to dry-docking) for this vessel can be estimated as follows:

- Estimated Fair Market Price as of November 2018 **\$ 410,000 USD.**

This estimated FMV is determined from consideration of the average selling price for closest comparable vessels which are currently offered for sale in similar service, with adjustments to include the observed conditions noted in this survey.

It is our professional opinion that the remaining useful life expectancy for this vessel should be considered as approximately 3 - 5 years. This opinion is based on the current age of the vessel and the fact that the vessel has virtually arrived near to a residual value. It is a commonly known fact that the yearly costs for maintenance and repairs significantly increase with a vessel's age. When such costs dramatically exceed the residual value, it is normally a point where consideration for the vessel retirement is seriously reviewed in the company business plan. However, as with any vessel, the actual useful life expectancy is primarily contingent upon management policies and the quality of preventative maintenance programs which are employed.

DEFINITIONS:

Fair Market Value is an opinion, expressed in terms of money, at which a property would change hands between a willing buyer and a willing seller, neither under any compulsion to buy or sell, and both having reasonable knowledge of relevant facts, as of a specific date.

Remaining Useful Life is the estimated period which a property of certain effective age is expected to be used before it is retired from service.

Terminal or Residual Value in connection with a tangible asset refers to the value of an asset after expiration of its normal useful life, or the value remaining after part of the property's life has been consumed.

No warranty as to the condition, seaworthiness, or marketability of the subject vessel is expressed or implied in anyway whatsoever by this survey report. Neither the Corporation, nor its officers, directors, surveyors, employees, representatives, nor agents, under any circumstances whatsoever, are to be held responsible for any error of judgement, negligence, omissions, misrepresentations, or misstatements in this report. This inspection is conducted and presented in this report without prejudice, or bias, to any of the Parties concerned.

Respectfully submitted,



KOPCO Marine Services, Inc.

Kirk O. Palmquist – INSB-Class Marine Surveyor

CONDITION & VALUATION SURVEY REPORT

100 Feet x 32 Feet x 6 Feet

**116 GRT / 116 NRT
PASSENGER-VEHICLE FERRY BARGE**

USS BRANDON RANDALL



PRINCIPAL:	BALD HEAD TRANSPORTATION AUTHORITY P.O. BOX 3069 BALD HEAD ISLAND, NORTH CAROLINA, 28461
REGISTRY:	UNITED STATES OF AMERICA
USA Official No.:	1091842
INSPECTION DATE:	November 17 & 18, 2018
REPORT DATE:	January 27, 2019

GENERAL PARTICULARS

CURRENT REGISTRY:	USA – OFFICIAL # 1091842
CURRENT HOME PORT:	BALD HEAD ISLAND, NORTH CAROLINA
CURRENT CALL SIGN:	N/A
CURRENT OWNERS:	BALD HEAD ISLAND LIMITED, LLC # 5 MARINA WYND P.O. BOX 3069 BALD HEAD ISLAND, NC 28461 U.S.A.
CURRENT OPERATORS:	BALD HEAD ISLAND LIMITED, LLC # 5 MARINA WYND P.O. BOX 3069 BALD HEAD ISLAND, NC 28461 U.S.A.
I.M.O. No.:	N/A
PREVIOUS NAMES:	N/A
BUILT BY:	STEVENS TOWING COMPANY, INC. 4170 HIGHWAY 165 YONGES ISLAND, SOUTH CAROLINA 29449 U.S.A.
HULL NO.	UNK.
DATE OF CONSTRUCTION:	1999
DATE OF DELIVERY:	FEBRUARY 25, 1999
REGISTERED G.R.T.:	116
REGISTERED N.R.T.:	116
ITC-69 G.R.T.:	N/A
ITC-69 N.R.T.:	N/A
TYPE OF SERVICE:	PASSENGER / VEHICLE FERRY BARGE – USCG SUB-CHAPTER ‘I’
SERVICE AREA:	BETWEEN SOUTHPORT, NC. AND BALD HEAD ISLANDS, NC. NOT MORE THAN (1) MILE FROM SHORE.
MAX. # OF PAX:	0 – (12 PERSONS IN ADDITION TO CREW)
MAX # OF CREW:	1 DECKHAND – (+ 2 OTHER PERSONS IN CREW)
L.O.A.:	100.00 FEET
L. (ART. 2 (8)):	N/A
MOULDED BREADTH:	32 FEET

MOULDED DEPTH:	6 FEET
MOULDED DRAFT:	3.00 FEET
DEADWEIGHT:	150 LT – (APPROX.)
LIGHTSHIP:	110 LT
CLASS SOCIETY:	N/A
PRIOR DRY-DOCK:	DECEMBER 04, 2014
LAST DRY-DOCK:	OCTOBER 18, 2017
NEXT DRY-DOCK:	DECEMBER 04, 2019

CERTIFICATION:

- | | | |
|---|--------------------|---------------------|
| • USCG CERTIFICATE OF DOCUMENTATION (COD) | ISSUED: 03-24-2018 | EXPIRES: 04-30-2019 |
| • USCG CERTIFICATE OF INSPECTION (COI) | ISSUED: 02-19-2014 | EXPIRES: 02-19-2019 |
| • USCG STABILITY LETTER | ISSUED: 03-22-2002 | EXPIRES: N/A |

CONDITION OF INSPECTION:

THIS IS TO CERTIFY that the Passenger-Vehicle Ferry Barge USS BRANDON RANDALL was inspected by the undersigned Marine Inspector on November 17 & 18, 2018 for the purpose of determining the Condition & Valuation of the vessel. The vessel was afloat dockside at the Bald Head Island Ferry Terminals, 1301 Ferry Road SE, Southport, North Carolina, 28461.

The vessel was prepared for inspection with all hull compartments open, ventilated, and available for inspection.

This Condition and Valuation survey Report was requested by Bald Head Island Transportation Authority and is for their account.

GENERAL VESSEL DESCRIPTION:

The USS BRANDON RANDALL is a small Ferry Barge, built in 1999 by Stevens Towing Company, Inc. of Yorges Island, South Carolina. The vessel is inspected by the United States Coast Guard (USCG) under Sub-Chapter I rules and regulations. The vessel currently maintains a valid COI for operation with a maximum of 1 Deckhand, 2 Other Persons in crew, 0 Passengers, and 12 Persons in addition to the crew, for a total of 15. It is in dedicated (daylight only) ferry service between Southport, North Carolina and Bald Head Island, North Carolina.

The vessel is an all steel Deck Barge with a forward raked bow and a square stern. There is a 39.5" high combination pipe hand-railing and steel bulwark with freeing & mooring ports running along the P&S sides and partially at the outboard stern of the vessel. All barge corners are rounded. The bow vertical headlog is 24" and then straight-raked to a 5-foot radius transition plate into the bottom hull. The sternlog is square without any raking. There are no skegs. The deck of the vessel is flat, without sheer or camber. The vessel has a total of NINE (9) water-tight hull compartments which are accessible by 18" round; flush water-tight 'twist-lock' manholes, as manufactured by Nabrico.

Frame spacing is 5'- 0" in the bow forepeak compartment and 6'- 0" thereafter to the sternlog. The hull is longitudinally framed throughout on 19.25" spacing. The vessel has FOUR (4) continuous transverse water-tight bulkheads and ONE (1) continuous longitudinal centerline water-tight bulkhead aft of the fore peak. The fore peak is one compartment and does not have a centerline bulkhead.

The vessel scantlings are noted to be as follows:

BOTTOM:	5/16" plating with 5" x 3" x 5/16" longitudinal angles supported by 9" x 13.4# channel.
DECK:	1/2" plating with 6" x 3.5" x 5/16" longitudinal angles supported by 15" x 3" x 3/8" flanged plate
SIDES:	5/16" plate with 5" x 3" x 5/16" longitudinal angles supported by 9" x 13.4# channels
CENTERLINE WTB:	1/4" plate with 4" x 3" x 5/16" vertical angle stiffeners
TRANSVERSE WTB:	1/4" plate with 5" x 3" x 5/16" vertical angle stiffeners
HEADLOG:	1" plate x 24" wide with 15" x 3" x 5/16" vertical flanged plate stiffeners
STERNLOG:	1" plate x 18" wide top and bottom; 1/2" plate in between with 15" x 3" x 5/16" vertical flanged plate stiffeners
CORNERS:	1" wrapper plating with 18" radius
TRANSVERSE TRUSS:	6" x 6" x 1/2" vertical angle stanchions with 5" x 5" x 5/16" diagonal angle braces
BOW LONG. TRUSS:	5" x 5" x 5/16" diagonal braces spaced 19.25" with 6" x 3" x 5/16" bottom chord from (the headlog) frame 0 to frame 1 and a 15" x 3" x 5/16" flanged plate bottom chord from frame 1 to frame 2.

The barge has a 6" x 1" flat-bar fender welded 18" below the main deck level on the P&S sides and on the stern. The bow is fit with a P&S segmented rubber fender for pushing against the loading dock. Heavy plates for wear are welded atop of the bow deck to take the rubbing of the shore-side vehicle loading ramp.

The vessel is fit with TWO (2) 18" mooring kevels forward and TWO (2) 18" mooring kevels aft. TWO (2) 12" single 'horned' bitts and TWO (2) 18" kevels are fit at the P&S stern corners to securing and tensioning the barge to the push boat. All deck fitting are mounted atop heavy plate doubling plates welded to the deck. Storage lockers are provided at the stern for lifejackets. A single "danforth" style anchor with a leading section of 1/2" chain and 3/4" soft rope is provided which is manually launched overboard. The anchor weighs about 70# and has an approximate holding strength of 3000#. It is manually launched and retrieved.

The below deck arrangements is as follows:

- A. The Fore Peak (Frame FP – 2) is a single void space.
- B. The Second compartments aft (Frame 2 – 5) are a P&S void tank.
- C. The Third compartments aft (Frame 5 -12) are a P&S void tanks.
- D. The Fourth compartments aft (Frame 12 – 15) are P&S void tanks.
- E. The Aft Peak compartments (Frame 15 – 17) are P&S void tanks.

There is no machinery or electricity aboard the barge. Also, there is no provision for navigation lighting for use during night-time operations

EQUIPMENT – SAFETY & FIRE-FIGHTING:

- 1. 15 – ADULT TYPE I PFD's
- 2. 2 – CHILD TYPE I PFD's
- 3. 2 – 30" DIA. LIFE RING with rope – USCG approved
- 4. 2 – 30" DIA. LIFE RING with water light – USCG approved
- 5. 2 – 20# ABC, USCG Type A-II; BC-III, Dry Chemical hand-held fire extinguishers
- 6. 1 – 50# ABC, USCG Type B-V, Dry Chemical semi-portable fire extinguisher

VESSEL CONDITION INSPECTION:

UNDERWATER HULL:

No underwater hull inspection was requested. However, from the internal tank inspections there were no observed bottom hull damages, such as upset plating or buckled stanchions or diagonals.

MAIN DECK – EXTERIOR:



Photo # 1 – Main Deck at bow showing wear plates



Photo # 2 – Main deck looking to stern



Photo # 3 –Port side forward corner



Photo # 4 – Rubber fender at starboard bow



Photo # 5 – Starboard bulwark



Photo # 6 – Port bulwark



Photo # 7 – Typical wastage at port side bulwark

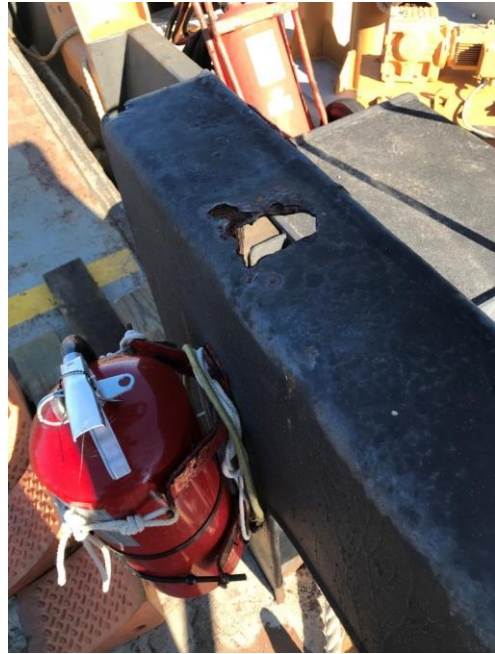


Photo # 8 – Typical wastage at port side bulwark



Photo # 9 – Starboard side mooring arrangement



Photo # 10 – Port side mooring arrangement



Photo # 11 – Starboard bow & Side shell elevation



Photo # 12 – Port bow & Side shell elevation



Photo # 13 – Anchor position at port side hand-railing



Photo # 14 – Starboard aft corner & Side shell elevation

INTERNAL VOID TANKS:



Photo # 15 – Bow rake trusses between frames 1 & 2



Photo # 16 – Bow rake trusses at the Headlog



Photo # 17 – Port side shell brackets in fwd. rake at WTB # 2



Photo # 18 – Typical condition of overhead in the fwd. rake.



Photo # 19 – Starboard # 2 looking to CL between Frs. 2 - 3



Photo # 20 – Port # 2 - looking to CL between Frs. 4 - 5



Photo # 21 – Port # 3 side shell brackets at WTB # 12



Photo # 22 – Port # 3 at CL – looking fwd. at Fr. 10



Photo # 23- Port # 3 at Side shell – looking fwd. at Fr. 9



Photo # 24 – Port # 3 – looking towards Side Shell



Photo # 25 – Typical access ladder to hull tanks



Photo # 26 – Port side shell at corner to sternlog



Photo # 27 – Port side aft peak – looking to CL and Fr. 16 & Fr. 17 (Sternlog)



Photo # 28 – Sternlog construction with 1” x 18” PL top & bottom and vertical 15” x 3” x 5/16” Flg. PL stiffeners.

VESSEL EVALUATION OF CURRENT CONDITION:

Based on this inspection and in the opinion of the undersigned, the general condition and maintenance of the vessel can be rated according to the following schedule:

RATING SCALE (1-10)

- | | |
|-----|-----------------------|
| 1. | New |
| 2. | Excellent Maintenance |
| 3. | Very Good Maintenance |
| 4. | Well Maintained |
| 5. | Average Maintenance |
| 6. | Fair Maintenance |
| 7. | Poor Maintenance |
| 8. | Very Poor Maintenance |
| 9. | No Maintenance |
| 10. | Scrap |

Description/Area	Rating	Comments
Exterior Structure – (Above Main Dk.)	5	(wasted sections of bulwarks need to be replaced)
Internal Structure (Compartments & Tanks)	3	(some areas of corrosion on structure in way of manholes)
Manholes and Hatches	5	(some manholes have WT issues with gaskets)
Exterior Hull & coatings - (Above WL)	3	
Exterior Hull & coatings – (Below WL)	n/a	(unavailable for inspection)
Interior Hull & Tank coatings	4	(localized areas of corrosion & paint coating failures)
Deck coatings	3	
Deck Fittings	3	
Vessel Machinery	n/a	(none fit)
Piping, sea chests, and valves	n/a	(none fit)
Electrical installation & lighting	n/a	(none fit)
Safety & Fire Equipment	4	(As required for current service route)
Vessel Moorings	3	

VALUATION CONDITIONS:

In addition to the observations noted in this report, the following items are considered by the undersigned to have an effect on determining the current market value for this vessel:

- The vessel was USA built and is USA flagged.
- The vessel age is 20 years.
- The vessel is up to date and maintains all required certification by USCG and remains in active ferry service at her current service location.
- The preventative maintenance program that continues to be used by the current owner /operator contains a verifiable tracking method for the various mechanical systems and maintenance records.
- The observed interior condition of each of the tanks indicates satisfactory maintenance of the original structural integrity of the hull, and as such adds to the value and longevity of the barge.
- The barge has some issues with the WT integrity of the manholes sealing properly. There was observed evidence that water has been leaking into the void compartments and creating minor issues of corrosion and paint coating failures.
- The condition of the bulwark plating will require some areas of replacement in the near future.
- The barge is limited to daylight operation only as there are no navigation lights, or shapes provided aboard.

COMPARATIVE VESSELS:

This estimate is prepared using the cost and comparable sales approach to determining the estimated value. Our review included discovery of comparable size (USA Flag) deck barges as follows:

1.	96' x 32' x 6'	(Spud Barge) – Built 1999	Asking Price = \$ 220,000
2.	110' x 30' x 7'	(Deck Barge) – Built 1997	Asking Price = \$ 195,000
3.	120' x 30' x 7'	(Deck Barge) – Built 1997	Asking Price = \$ 190,000
4.	120' x 30' x 7'	(Spud Barge) – Built 1997	Asking Price = \$ 210,000
5.	120' x 30' x 7'	(Deck Barge) – Built 1995	Asking Price = \$ 185,000
6.	120' x 30' x 7'	(Deck Barge) – Built 2006	Asking Price = \$ 260,000

VALUATION:

With consideration of the above information, it is the expressed opinion of the undersigned, that the current “Fair Market Value” (As Is, Where Is) (prior to dry-docking) for this vessel can be estimated as follows:

- Estimated Fair Market Price as of January 2019 **\$ 245,000 USD.**

This estimated FMV is determined from consideration of the average selling price for closest comparable vessels which are currently offered for sale in similar service, with adjustments to include the observed conditions noted in this survey. It is our professional opinion that the remaining useful life expectancy for this vessel can be estimated to be 15 (+) years with continued upkeep and maintenance. Note that vessel useful life expectancy is primarily contingent upon management policies and the quality preventative maintenance programs.

DEFINITIONS:

Fair Market Value is an opinion, expressed in terms of money, at which a property would change hands between a willing buyer and a willing seller, neither under any compulsion to buy or sell, and both having reasonable knowledge of relevant facts, as of a specific date.

Remaining Useful Life is the estimated period which a property of certain effective age is expected to be used before it is retired from service.

Terminal or Residual Value in connection with a tangible asset refers to the value of an asset after expiration of its normal useful life, or the value remaining after part of the property's life has been consumed.

No warranty as to the condition, seaworthiness, or marketability of the subject vessel is expressed or implied in anyway whatsoever by this survey report. Neither the Corporation, nor its officers, directors, surveyors, employees, representatives, nor agents, under any circumstances whatsoever, are to be held responsible for any error of judgement, negligence, omissions, misrepresentations, or misstatements in this report. This inspection is conducted and presented in this report without prejudice, or bias, to any of the Parties concerned.

Respectfully submitted,



KOPCO Marine Services, Inc.

Kirk O. Palmquist – INSB-Class Marine Surveyor