

# BHITA Reconnaissance Report

## Introduction

The HMS Consulting project team performed a site visit at the Deep Point Terminal and Bald Head Island during a 4-day period from Monday, August 13th through Thursday, August 16<sup>th</sup>. Reconnaissance and data gathering activities were largely performed to confirm the integrity of the system and to help further understanding of the operations, assets, revenue generation and the general business environment.

The purpose of this report is to chronicle the progress of activities accomplished during the site visit that will ultimately be used to support the development of Phase 1 pro forma financials. Based on this foundation, a summary of recommendations will be drafted under separate cover and will guide Phase 2 activities as the Authority prepares to take responsibility and control of the system.

## Pre-Visit Planning

HMS Consulting collaborated with BHITA board members, Bald Head Island Limited and Davenport & Company LLC to facilitate a scope of work for the site visit entitled "*BHITA Reconnaissance Plan*". The scope was developed in advance and provided an outline of planned activities.

Prior to arrival a schedule outlining meeting and interview times with key personnel was developed and time was allocated to examine vessels, marine infrastructure, terminals, trams and parking lots.

Information and data requests were prepared in advance and further requests were made during the visit. Representatives from Bald Head Island Limited provided access to all internal documentation during the visit.

## Conduct of Visit

The primary focus of the site visit was to gather information and insights that may not be otherwise available from teleconferences or reports. Experiencing and observing activities in person contributes to the best overall understanding of the system and its components, and a first-hand appreciation for challenges facing the operation (such as baggage handling).

While on site, team members engaged in detailed discussions about the project status and how the mission and current activities align with the transition of ownership. Meetings and interviews were an important source of information during the visit. A broad cross section of managers, shift supervisors, dock persons, vessel crews, parking attendants and maintenance personnel were captured. The HMS project team attended a BHITA board meeting on Tuesday August 14<sup>th</sup> in both open and closed session. Impromptu discussions with all parties were encouraged and occurred on the spot throughout the week as the team deemed necessary.

Field notes and observations were recorded by individual project team members and will be used to draw conclusions where possible and select items that require closer examination. Materials were collected (financials, training material, documentation, etc.) and insights were gathered regarding successes and challenges in the organization.

A summary of activities accomplished during the site visit follows.

## Bald Head Island Transportation, Inc.

### Ferry Operations

Ferry operations are all incorporated into a single entity, BHI Transportation, which includes the vessels, tram operations, terminals and marine maintenance. This includes maintenance and repairs of the tug and barge operation, although it is technically a separate legal entity.

### Vessels

The ferry operation is comprised of four vessels: The *M/V Adventure* and the *M/V Sans Souci* are aluminum monohulls built in 1987 and 1976 respectively. The *M/V Patriot* and the *M/V Ranger* are aluminum catamarans built in 2003 and 2006. All vessels have a passenger capacity of 150 (Subchapter T) as well as the capability to carry a number of luggage dollies. There are two separate ferry services which operate in parallel, on staggered schedules; the regular passenger service for island residents and visitors to the island and the contractor service for employees commuting to the island. As such, at least two vessels are required per day in order to fulfill the schedule. Typically the catamarans are used for the passenger service while the older monohulls are used for contractor service. There is flexibility in this arrangement except periods of high passenger service traffic where the higher luggage dolly capacity of the catamarans is required.



*Three BHI vessels at maintenance berths*

Two surveys have reportedly been performed for each vessel in the ferry fleet. [REDACTED]



### Activities Performed

Each vessel was examined at the dock while not in service to identify any clear indication of nonconformity to industry standards. A walkthrough of each was conducted and the general condition was noted. cursory inspections of engine rooms, machinery spaces, tanks, voids, steering compartments and interior spaces were performed, and the general condition of the main engines and auxiliary machinery were noted.

The project team met with and discussed details of the ferry operations with the CEO, Transportation Manager, Assistant Transportation Manager, Masters and Mates<sup>2</sup>. Relevant operational activities regarding the ferry system were discussed then observed while touring the facility and riding onboard the vessels:

- ✓ Ticketing
- ✓ Ferry system capacity and reliability
- ✓ Schedule / vessel reliability
- ✓ On time performance
- ✓ Demand responsiveness
- ✓ Berth capacity
- ✓ Operating environments
- ✓ Routes
- ✓ Weather
- ✓ Harbor traffic / Maneuvering times
- ✓ Mooring times
- ✓ Gangway positioning
- ✓ Loading and offloading process
- ✓ Support services (fuel, potable water, sewage)
- ✓ Shipyard and overhaul planning

Active marine management systems and programs relevant to overall valuation were also reviewed

- ✓ Maintenance Programs
- ✓ Safety and Environmental Programs
- ✓ USCG Drug Testing Program
- ✓ Severe Weather and Hurricane Plan
- ✓ Training Programs
- ✓ Operating Procedures

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<sup>1</sup> The Mercator Report references surveys but does not provide the actual surveys or type and scope of surveys.

<sup>2</sup> Mates (licensed) are not required by the COI. The COI requires (1) licensed Master and (2) deckhands. It is the practice at BHI Transportation to call the deckhands Mates although most do not have a license as Mate or Master.



*Monitor in maintenance facility showing active projects*

### *Tram*

Trams are used on Bald Head Island to transport passengers and their luggage to/from the ferry and their accommodations. Each tram consists of a truck capable of carrying luggage in a covered bed, towing a passenger trailer with seating for 12. Some but not all trailers are designed to accommodate wheelchairs.

#### *Activities Performed*

The project team met with the Assistant Transportation Manager responsible for tram operations as well as a shift supervisor and several tram drivers. The team discussed tram maintenance, witnessed loading and offloading activities and discussed dispatching and driver training requirements. The team rode on board a tram, toured the route and conducted cursory visual inspections of the trams, trailers and associated equipment.

### *Deep Point Terminal / Bald Head Island Terminal*

Each terminal is comprised of docks and landings for the ferries and barges, administrative offices and parking lots. The terminal at Deep Point is substantially larger and serves as the operations center for the system and is home to the fleet's maintenance facility.





*Deep Point Terminal viewed from the entrance channel*

#### Activities Performed

The project team met with and discussed details of terminal operations with the Assistant Transportation Manager, Customer Service Representatives, Shift Supervisors, Dock Persons, Dispatchers, Outfitters and Shuttle Drivers. Relevant activities regarding terminal operations were discussed and observed. This included extensive discussions and demonstrations of baggage handling and logistics.

The team toured both facilities and met with Customer Service Representatives (CSR's), Shift Supervisors, Dock persons, Dispatchers, Outfitters and Shuttle Drivers.

Visual inspections of vertical sheet-pile walls and pilings at both facilities were conducted from a small vessel capable of floating underneath the docks. Relevant activities regarding the terminal operations were discussed and observed while inspecting the infrastructure and touring the facilities:

- ✓ Terminal layout and design
- ✓ Dock/Terminal capacity
- ✓ Passenger flow
- ✓ Dwell times
- ✓ Loading hold points
- ✓ Interactive traveler information
- ✓ Passenger security and screening
- ✓ Ticket verification
- ✓ Gangways and boarding ramps
- ✓ Intermodal transportation efficiencies
- ✓ Tram network
- ✓ Passenger trailers
- ✓ Luggage dollies
- ✓ Sheet-pile walls
- ✓ Concrete bulkheads
- ✓ Pilings
- ✓ Dock structures
- ✓ Emergency power

### Marine Maintenance

The Marine maintenance facility performs operational level (filter change-outs, etc) and some intermediate level (engine overhauls, etc) maintenance for all vessels. Machinery maintenance requirements are determined locally via manufacturer’s technical information, and a computer-based maintenance tracking system that was developed in-house is used to document maintenance requirements and activities. The team was provided a tour of the maintenance facility and a brief explanation of the in-house tracking system.

#### Activities Performed

The project team toured the facility and met with and discussed details of marine maintenance with the Marine Maintenance Superintendent, the Marine Maintenance Assistant and Marine Mechanics.

Relevant activities regarding terminal operations were discussed and observed.

- ✓ Preventative maintenance
- ✓ Routine maintenance
- ✓ Fueling
- ✓ Oil changes
- ✓ Managing waste oil
- ✓ Vessel rotations
- ✓ Shipyard planning
- ✓ Work orders
- ✓ Record keeping
- ✓ Solicitation and bidding
- ✓ Training
- ✓ Budgeting

### Bald Head Island Limited, LLC – Parking Department

The Parking Operation at Deep Point is comprised of approximately 36 acres of developed parking. There are four classes of parking lots 1) General Parking 2) Premium Parking 3) Contractor Parking and 4) Employee Parking. Parking fees are primarily collected through automated credit card kiosks.

The project team met with the lead parking attendant and discussed some details of the operation including cash handling and reconciliation, toured the offices and parking lots and utilized the credit card payment kiosk upon arriving and departing from the site visit.

#### Activities Performed

- ✓ Parking lot layout and access
- ✓ Approaches / Signage
- ✓ General condition
- ✓ Fee Collection

### Bald Head Island Limited, LLC – Tug and Freight Barge Department

The barge operation is comprised of one tug, the *MV Capt Cooper*, built in 2017 by Metal Trades, Inc of South Carolina, and one 100’ x 30’ deck barge, the *USS Brandon Randall*. The operation delivers vehicles, construction equipment and consumable goods to and from the island via a Ro/Ro-type service with shore-based ramps at each terminal.



*Tug and freight barge offloading at Deep Point ramp*

#### Activities Performed

The project team met with the Logistics Manager, Towing Master and Barge Mate to discuss the details of the operation. The team sailed on board the vessel from the Deep Point Terminal to Bald Head Island, observed the operation and performed inspections of the engine room and machinery spaces on board. The following topics were observed and discussed:

- ✓ Reservation systems
- ✓ Schedule and rates
- ✓ System capacity and reliability
- ✓ On time performance
- ✓ Demand responsiveness
- ✓ Weather and limitations
- ✓ Harbor traffic / Maneuvering times
- ✓ Narrow entrance to Bald Head Island
- ✓ Loading and offloading process
- ✓ Contingency planning
- ✓ Barge ramp
- ✓ Emergency power

The new tug *Capt Cooper* reportedly performs extremely well having been designed and build specifically for the service. Of note, with the tug pushing the barge at a length overall of 150' approaches the maximum combined length possible to make the turn from the BHI entrance channel into the basin.

## Summary

The reconnaissance trip in support of phase I was very productive. All aspects of the ferry service operation were discussed and observed to varying degrees, with the primary focus being the vessel service and the support structure behind it. Personnel involved in the operation were very forthcoming and accommodating with our requests to ride the vessels, interview crewmembers, inspect the facilities, and observe operations. Some key observations include:

- Overall, a well-run ferry service was witnessed. Viewed as a 'system', the vertical integration of the many modes of transportation, along with support functions is effective and efficient.
- There is a strong culture of using management systems to ensure maintenance, training, safety and other operational elements are effectively executed. This appears to be driven from the top with great effect. In some cases these systems would benefit from better adherence to industry standards and best practices.
- The operating schedule is more demanding than it would initially appear. With three vessels running at most times, on a time schedule which requires diligence by the crews, it is easy to see how delays can easily compound and back-ups frequently occur on high traffic days.
- Luggage creates a chokepoint in the operation which can potentially affect other aspects.
- While there is plenty of space in the uplands of Deep Point Marina for current operations and to expand as needed, the Bald Head Island terminal is already maxed out and has no additional room for growth.