

# MEYERROSE AND CO., INC.

MARINE SURVEYORS – CONSULTANTS

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17 March 2011

FILE NUMBER: M-6780

## INSPECTION REPORT

ACCOUNT: SANTE` SHIPPING LINES

VESSEL: TWIN SCREW COASTWISE TUG “ALEX McALLISTER”

This is to certify that on 14 March 2100 the undersigned Marine Surveyor, at the request of Mr. Bruno-Elias Ramos, CEO, Sante` Shipping Lines, without prejudice and for interested parties, did carry out a general Condition and Valuation and Suitability for service inspection survey of the twin screw coastwise tug “ALEX McALLISTER”, as the vessel lay afloat at the Bridgeport & Port Jefferson Steamboat Co., 102 West Broadway, Port Jefferson, New York.

It is reported the vessel is in process of being purchased by the Sante` Shipping Lines. Mr. Ramos and other company personnel were in attendance during the survey.

## VESSEL PARTICULARS

1. Name: “ALEX McALLISTER”, ex “Wal-row”.
2. Owners/Operator: McAllister Towing and Transportation Co., Inc.
3. Registered Dimensions: 75.2'L x 21.8'B x 7.5'D, approx. 86' LOA.
4. Official No.: 280535 – 98 GRT / 66 NRT.
5. Built: 1960 by Walker E. Rowe, Georgetown, S.C.
6. Construction: All welded steel.
7. Horsepower: 800 via twin 12V71 Detroit Diesel engines.
8. USCG Inspected Vessel: No. Has valid Certificate of Documentation, expires 11/11.
9. ABS Classed Vessel: No.
10. Utilization: Reportedly to be utilized for towing freight barges, based from Miami to the Caribbean, to Haiti, for example.

## VESSEL DESCRIPTION

The subject vessel is a conventional model hull configuration (for age), all welded steel construction, twin screw – diesel driven, coastwise service hawser tugboat, having a single main deck, curved stem, double chined bottom, and elliptical stern.

There is a single level deckhouse on deck with the pilothouse atop at forward end of the deckhouse.

There is internal and external access from the engine room to the pilothouse.

The main deckhouse is arranged from forward as follows: (former) stateroom with access door from galley; galley with port and starboard watertight doors; centerline longitudinal passageway to aft with wooden door each end, and arranged with (limited access) stairwell to Captain's stateroom to starboard; two x 2 berth staterooms; upper engine room with toilet locker to port and storage locker to starboard with single stairway down to engine room, and lengthwise catwalk to watertight door at aft end of the deck house.

The pilothouse level deckhouse has the wheelhouse forward with a port and starboard wooden access door, and a single berth Captain's stateroom to aft separated by a wooden door.

Internally, the hull is divided by four transverse steel bulkheads to form (5) compartments from forward as follows: forepeak (potable water); forward storage; fuel oil; engine room (with two non-integral ballast tanks); and lazarette (aft ballast).

Total fuel capacity is 11,773 gallons in one compartment, lube oil capacity is approx. 80 gallons; dirty oil capacity is approx. 100 gallons; hydraulic oil capacity is approx. 100 gallons; and potable water capacity is approx. 1,400 gallons in one hull compartment and 4 x 100 gallon drums. Ballast capacity is reported to be 5500 gallons in three tanks

The hull is conventionally constructed with approx. 5" x 3" angle frames on about 30" centers, with estimated 1/2" and 3/8" shell plating.

## EQUIPMENT

Conventional complement of equipment fitted as follows:

### Hull:

1 – full length shaped steel hull guard, with two similar partial length guards (as could be seen).  
Complement of rubber fendering, including cut tire fender pack at bow with rope pudding, large tire fenders chain rigged along each side at around stern.

### Deck:

Perimeter approx. 18" high plate type bulwark with low freeing ports.

- 1 – staple at stem.
- 1 – double horned bitt centerline forward.
- 4 – single post bulwark quarter bitts, (2) each side.
- 1 – open stairwell forward with handrails, forward end of deckhouse.
- 3 – watertight type steel deckhouse doors, on approx. 14" high sills.
- 1 – approx. 28" x 28" x 24" high square hatch on foredeck with hinged secured cover,

for access to forward storage compartment.

1 – rectangular hatch with flush bolted cover on deck aft for access to lazarette.

1 – double horned towing bitt centerline aft of deckhouse with 5 HP electrically driven Fairbanks Morse Type 070 capstan alongside.

1 – steel grate platform on steel frame at aft deck over steering gear, with low texas bar to aft. Two rudder (stocks) each fitted arm, made up to jockey bar and one hydraulic ram.

Complement of night lights with globes. Fixed handrails. Raised fuel vents, each with non-return vent and fuel oil fill with quick disconnect fitting. One fuel oil discharge with valve and threaded cap. Potable water fill forward with threaded cap, and tank vent with non return fitting. Port and starboard ballast fills, each with threaded cap (no recent use).

Complement of house type air-conditioner units in deckhouse walls.

Atop deckhouse:

Perimeter two tier pipe handrails on pipe stanchions.

Complement of name boards. (1) bell.

1 – exhaust stack on low trunk. Ventilation louver each side of stack, each with plate weather cover, one straight ladder aft side of stack. Electrically driven exhaust blower, in stack.

Misc. vents, including engine room intake with electric blower.

1 – light mast, centerline aft.

1 – flag staff, aft.

1 – aft facing floodlight.

1 – approx. 150# anchor.

1 – inflatable life raft.

1 – sheet metal paint locker, (1) towing hawser, covered.

Pilothouse:

Perimeter two tier pipe safety rails on pipe stanchions.

2 – wooden doors for pilothouse access.

Perimeter pilothouse eyebrow.

1 – straight steel ladder aft side for access to atop pilothouse.

1 – house type air-conditioner in aft wall.

1 – emergency power battery, aft side of deckhouse, boxed-covered-secured, and fitted with breaker controller.

Atop Pilothouse:

Complement of electronic antennas, radar scanner antenna, (1) searchlight, hailer speaker, horns, (1) forward facing floodlight.

Complement of navigation lights.

1 – steel towing light mast.

## PILOTHOUSE EQUIPMENT

The pilothouse is fitted with windows on all sides (four windows have roll down capability), with wooden door access each side. The space is fitted with conventional helm station forward, with portable padded helm seat, and finished with very original ceilings and liner. There is a raised plywood floor over the steel deck. There is internal and external access as previously described.

Equipment includes:

- 2 – NFU steering controllers. Steering system is electro hydraulic.
- 1 – set engine controls (air), basic engine gauge panels, General alarm, and Hiller Systems Fire & Bilge Flooding Alarm control panel. Electrical breaker panel. Light fuse panel. In-house telephone
- 1 – Ritchie magnetic compass.
- 1 – Robertson rudder angle indicator.
- 1 – Furuno GPS/WAAS navigator.
- 1 – Icom IC-M302 and one model IC-M502 VHF radiotelephones
- 1 – Standard Horizon hailer unit with fog signal.
- 1 – Furuno RD-30 digital depth finder.
- 1 – Furuno Universal FA-100 AIS.
- 1 – Furuno 1940 radar.
- 1 – battery charger in Captain's room.

## ACCOMODATIONS

The staterooms and galley of the vessel are conventionally arranged and basically finished and equipped, basically original.

The spaces are heated and cooled respectively by wall mounted electric heaters and house type air-conditioning units mounted through the walls.

The galley is equipped with a refrigerator/freezer, small table with portable chairs, electric 4 burner stove with oven, single s/s sink with pressure hot/cold water service on counter with storage cabinets.

The toilet locker is fitted with a sink, toilet and shower stall, with pressure hot/cold water service.

## MACHINERY AND SYSTEMS

The upper engine room has a centerline longitudinal catwalk with safety rails. To forward is a Murphy panel with bilge alarm, a fuel alarm, and a General alarm. Engine exhausts are wrapped. There is an approx. 100# fire extinguishing tank with nozzle and hose fitted.

Propulsion power is provided by two model 12V71 Detroit Diesel engines developing about 400 HP each, which are naturally aspirated, fresh water keel cooled and air-started, and drive (reported) 66"D x 54"P propellers on approx. 6" steel shafts, through 6-1 reduction Twin Disc model MG-514 gears.

Auxiliary power is provided by two model 271 Detroit Diesel engines each driving a Delco 30 KW AC generator. The engines are fresh water keel cooled and 12VDC electric battery started (with LaMarche Constavolt charger provided). Two batteries are boxed-covered-secured and (2) Phase Three chargers fitted. These drive engines share one keel cooler, and must be run separately.

Other systems include:

Each main engine is fitted with a Vickers steering hydraulic pump. Electrical service is powered via one genset in continuous operation.

2 – self-contained electrically driven air compressors with two cylindrical storage tanks.

There are two potable water systems, one for the forward hull tank, and the second for the four x 100 drums. The drums hold water for the galley sink and boiler. There are two electrically driven Teel potable water pumps each with pressure demand tank, one system has in-line filter, and one x 30-gallon hot water heater is provided.

Bilge – ballast – fire manifold system, with (2) electrically driven pumps, plus, another Jabsco pump driven off the starboard main engine.

1 – 12VDC electrically driven submersible pump, for shaft log water collection.

1 – electrically driven lube oil pump, with lube oil storage tank adjacent.

1 – electrically driven fuel transfer pump, with fuel manifold. The main fuel filters are Racor type, with spin on secondary filters.

1 – master breaker panel, and Power Panels generator panel.

2 – electrically driven engine room blowers (respectively intake and exhaust).

1 – Microphor sanitary system, with sump canister.

The capstan is electrically driven and belt driven through a custom truck axle double right angle drive.

1 – Weil-McLain domestic boiler with water heated radiators fitted in the deckhouse. The engine room is also fitted with an overhead Modine forced hot air electric heater.

Other equipment includes a work bench with vise.

There is fixed concrete ballast in the bilges centerline between the main engines and extending to aft.

Tankage includes the port and starboard ballast water tanks, forward, hydraulic oil tank to port, dirty oil tank aft, and lube oil tank to starboard.

### FIRE-FIGHTING AND SAFETY EQUIPMENT

The vessel is equipped with one fire station outside of the deckhouse, with 1 ½" hose and nozzle provided.

A complement of portable fire extinguishers are provided with current tags.

Safety equipment includes:

Complement of PFD's.

- 1 – inflatable life raft.
- 2 – axe.
- 2 – ring buoys with lanyards.
- 1 – First Aid kit.
- 1 – flare kit.
- 1 – anchor.
- 1 – bell.

Other safety equipment includes:

At aft end of deckhouse: fuel cutoff switch; fire pump controller and port/starboard main engine emergency shutdown pulls.

Also at aft end of deckhouse: one sheet metal locker identified "Flammable" and (1) hailer speaker.

Fuel shutoff in deckhouse centerline passage way, to forward.

Posted Fire Station bill.

### CONDITION

Overall condition of the vessel is considered to generally satisfactory, with evidence of very limited current utilization.

External coatings and appearance are generally satisfactory. The main deck and deckhouse roof have very thick paint coatings with areas of deterioration. The

deckhouse roof is showing steel thickness deteriorations, and is "flexing".

The base of the deckhouse and the pilothouse show multiple areas of deteriorations, with some doubler and insert repairs, and extensive use of "Red Hand" putty. An extensive area of the port side of the deckhouse shows very heavy paint and rust blisters over an area about 8' x 4' above the deck.

The bulwark stanchions are variously lightly set down into the main deck, particularly each side from the forward quarter bits to aft. There are waste deteriorations in scattered areas of the bulwark coamings, particularly at the port aft quarter bitt.

The port sheer hull guard has been renewed in part crossing the #2 transverse bulkhead, including a small section of side shell insert renewed in way. This hull guard is then heavily distorted for a 6' run aft of the guard renewal.

As could be seen afloat, there is a doubler fitted at the port bow area, from waterline downward. A doubler is fitted on the bottom plating, internally, in the engine room, starboard, aft of the main engine.

Internal housekeeping is satisfactory. The engine room and machinery are reasonably clean. The engine exhausts are wrapped.

It is reported the vessel was last docked in Yr. 2006, with record of work done not available at time of this survey. The forepeak and lazarette compartments were not opened for this survey. It is reported the ballast tanks are kept dry.

It is reported the port main engine and #2 generator were swapped out with rebuilt units at time of the last shipyard period.

At this time, engines hours noted in the logbook were: PME – 519; SME – 1919; #1 Gen – 1569; #2 Gen – 516.

There is a hydraulic oil leak in piping at area of the steering electrical unit.

It was noted that sections of the main deck have been previously renewed in way the fuel tank.

During sea trial of the vessel, the starboard main engine shut down during a shift from forward to aft, and the port main engine high water temperature alarm went off, which conditions were noted by the attending Port Engineers.

## CONCLUSION

As far as may be ascertained from a general examination of the subject vessel

and machinery while afloat, without removals or opening up to expose parts ordinarily concealed, and without testing to ascertain thickness of structural members, or testing for tightness or opening up the machinery, it is the opinion of the undersigned that the hull, machinery, and equipment of the subject vessel are in generally satisfactory condition for operation, as well as for intended service.

Due regard should be used in utilization of this vessel in ocean waters due to the overall low profile of the vessel which will result in quantities of seawater on deck.

Further, no determination of inherent structural integrity or stability has been made, and no opinion is expressed or implied in this respect.



### RECOMMENDATIONS

1. Dry dock the vessel as soon as possible for inspection and maintenance and repairs as may be required. Thickness gauging of the hull is recommended.
2. Suitably repair the waste deteriorations in the bulwark coamings. It is felt that raising the height of the bulwark would be beneficial for service based out of Miami in order to reduce quantity of sea water on deck.
3. The base/sides of the deckhouse and pilothouse require proper repair of deteriorated steel.
4. The starboard deckhouse watertight door is sprung, and should be renewed. It is recommended all deckhouse doors be kept closed when underway in ocean waters.
5. Fit both pilothouse doors with watertight type doors.
6. The hatch cover to the forward storage compartment needs to be fitted with a proper rubber gasket/ guide installation, and ensure the dogs are fully operational. Keep this hatch cover closed at all times when underway.
7. Fit house type air conditioner units with suitable weather covers. The deckhouse portholes should be fitted with suitable weather covers.
8. In view of obviously very limited utilization, all systems – equipment - machinery to be fully checked for operation and rebuilt/repared as may be required.

The above report is a statement of opinion made, signed, and submitted without



VESSEL: "ALEX McALLISTER"

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prejudice to the rights and/or interests of whom it may concern.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Richard Meyerrose, Jr.", with a large, stylized flourish at the end.

Richard Meyerrose, Jr.  
Marine Surveyor - President

Enc: Photographs

RM/