

United States Coast Guard
Witness Statement

Statement of John E. Ward:

As partial owner and Managing Partner of Jackson Creek Marine, LLC (“JCM”), the information provided are the details of the events that occurred on August 8, 2023, involving the tugboat *Jacqueline A* (O.N. 638353) (the “Tug”) to the best of my knowledge.

As a small business responsible for a total of five tugs, JCM lacked the resources to bring all five vessels into compliance with USCG Subchapter M requirements simultaneously. We prioritized the order of working each vessel into compliance based on each vessel’s use, work schedule, and earning capacity. Based on these priorities, we withdrew the Tug *Jacqueline A* from service for hire approximately four years ago, as we brought our other four vessels into compliance one by one.

During the four years the Tug was withdrawn from service, crew from our other four vessels with idle time performed ongoing maintenance activities on the Tug to include, but not limited to, painting, general housekeeping, and maintenance of deck equipment.

The purpose of the Tug’s voyage to Harvey, Louisiana during the casualty voyage in August 2023 was to deliver her to a shipyard there for improvements necessary to bring the Tug into Subchapter M compliance.

The following is a timeline of the initial planning and preparation for the departure of the Tug:

Initial Planning for Compliance

JCM hired Ryan Dame as Port Engineer on November 2, 2020. Upon hire, Mr. Dame led the initial assessment of the Tug to determine what improvements could first be completed dockside at Ampro Shipyard, near the Tug’s hailing port. Following completion of our assessment of the Tug, we commenced the following repair, replacement, and renewal of the following equipment/systems to attain Subchapter M compliance:

- Electrical system upgrades
- Main engine and generator alarm panel replacement
- Bilge alarm replacement
- General alarm replacement
- Upgraded electronic safety systems
- Main engine and generator maintenance

Preparation for Departure

Based on research and experience, we determined that completing the remaining work to meet compliance standards locally was neither attainable nor financially feasible. Therefore, we

arranged to deliver the Tug to Total Marine Services in Harvey, Louisiana, based on past success with that shipyard, to complete the remaining work necessary for Subchapter M compliance.

March 2023: As a business associate was having a vessel delivered from the Gulf Coast to our shared dock in Virginia, we arranged for that same crew to deliver the Tug to Total Marine Services in Harvey, Louisiana.

March 9, 2023: The Tug departed Ampro Shipyard in Weems, Virginia and transited for seven hours to Fairlead Boatworks in Newport News, Virginia and was drydocked. During the voyage to Fairlead Boatworks, a competent crew and our port engineer examined all machinery and systems and noted no deficiencies in their operation.

In drydock, the Tug underwent a pre-transit hull inspection including, but not limited to, a plate thickness/corrosion survey to ensure that all plate thicknesses below the waterline were within a suitable tolerance for transit to Louisiana. During this survey, we also performed visual inspections of the hull, supported by management from Fairlead Boatworks. There were no issues identified by either party.

March 16, 2023: Auxiliary Systems Incorporated provided a Plate Thickness/Corrosion Survey UT Report. Only some isolated, coin-sized pits were found to exceed the corrosion limits, and these we planned to have ground and clad welded at Harvey, Louisiana. *See* attachment B. Upon simultaneous visual inspection of the hull, we found no basis for concern.

May 1, 2023: The Tug was removed from drydock and departed Fairlead Boatworks on a seven-hour voyage back to Ampro Shipyard.

May 2, 2023 – August 5, 2023: We continued routine maintenance in accordance with a dockside maintenance schedule and undertook other improvement efforts to include interior aesthetics.

August 5, 2023: Clifford McGallagher (Master), Ollie Seaman, Jr. (Mate), and Roger Davis (Deckhand) (together, the “Crew”) arrived at Ampro Shipyard prepared to depart with the Tug. John M. Ward, Jr. inspected the Master’s and Mate’s credentials and found them to be in good order. Mr. Ward then conducted a safety and operations orientation with the Crew, during which he explained and demonstrated how all systems on the Tug functioned. During this orientation, the Crew demonstrated ability and competency to safely operate and maintain the Tug during the voyage. Upon successful demonstration of safety procedures and operation of the Tug, it was determined the vessel would depart the following morning. The voyage plan was left to the Master’s discretion.

August 6, 2023 (approximately 0800 hours): The Tug departed Ampro Shipyard for Harvey, LA. The Master remained in ongoing contact with me throughout the transit by cell phone with reports indicating no issues or concerns with the Tug or the ongoing itinerary.

August 8, 2023 (approximately 1500 hours): The Master communicated that the vessel had traveled through Cape Fear Inlet, North Carolina and that the weather conditions were favorable to continue transit in the Atlantic Ocean to avoid possible delays and shoaling in the Atlantic

Intracoastal Waterway. The Master advised that he would follow the coast, staying in at least 25 feet of water, but remaining within sight of shore.

August 8, 2023 (1706 hours): The Master communicated that the ongoing transit was going well without issues or concerns.

Incident – August 8, 2023

Approximately 2100 hours: I was notified by a member of search and rescue from North Myrtle Beach Fire Station 2 that they had recovered the crew safely from the Tug and that the Tug had taken on water approximately 2.5 miles off North Myrtle Beach, South Carolina. To confirm the safety of the crew, I spoke with the Master on the duty phone that belonged to the representative from North Myrtle Fire Station 2.

Approximately 2200 hours: The same phone was used to contact me, and I was assured that all Crew were safe. I arranged lodging at a local hotel for the Crew, and the fire department provided transportation.

Approximately 2300 hours: I departed Deltaville, Virginia to respond to the incident in North Myrtle Beach.

August 9, 2023, 0530 hours: I arrived at the hotel to check on the crew and conduct post-incident procedures.

August 9, 2023: The Crew underwent drug testing as required by USCG regulations. It was not possible to arrange alcohol testing within two hours of the incident. However, there is no suspicion that alcohol was present on board, and alcohol played no role in the sinking of the vessel.

August 9, 2023: The USCG and NTSB interviewed each member of the Crew.

August 10, 2023: The USCG and NTSB interviewed the undersigned and my father, John M. Ward, Jr.

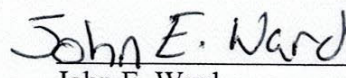
August 12, 2023: We submitted USCG Form 2692 and Form 2692-B by email to LT [REDACTED] [REDACTED] USCG.

Please see the following attachments:

Attachment A: Spending Report for the *Jacqueline A*

Attachment B: Plate Thickness/Corrosion Survey UT Report

Attachment C: Certificate of Manufacture of an Inflatable Life Raft and proof of purchase


John E. Ward
Managing Partner
Jackson Creek Marine, LLC

Jacqueline A: Date of Purchase: 04/09/2012. Price was \$630,000.

2012 \$197,963.17

Reed Vrablitz – Port Engineer: Time and materials \$91,201.57 Ayers

Marine Electronics: \$28,833.20

Anderson Paint: \$978.07

Hoffman Industries - Maintenance: \$1,102.58

Schuyler Maritime – Marine Supply: \$8,999.45

Miller Marine – Services: \$66,521.10

Ampro Shipyard & Diesel: \$327.20

2013 \$27,799.84

Reed Vrablitz – Port Engineer: Time and materials \$16,499.14 Twin

Disc Mid-Atlantic-Chesapeake: \$5397.14

Western Branch Diesel: \$5,903.56

2014 \$94,192.84

Reed Vrablitz – Port Engineer: Time and materials: \$10,221.35

Chesterfield Trading Co, Inc: \$654.02

Anderson Paint & Interiors: \$635.67

Western Branch Diesel: \$52,681.80

Western Branch Diesel: \$30,000.00 (2 new generators)

2015 \$76,909.26

Reed Vrablitz – Port Engineer: Time and materials: \$32,553.75

Ocean Products Research, Inc: \$6638.32

Culpepper Radiator Service: \$1367.80

Western Branch Diesel: \$15,552.00

Ayers Marine Electronics: \$20,797.39

2016 \$29,346.80

Reed Vrablitz – Port Engineer: Time and materials: \$14,344.00

Ocean Products Research, Inc: \$9,011.34

Anderson Coatings, LLC: \$1,322.14

AARD, Inc: \$313.76

Atlantic Metal Products, Inc: \$237.56

Hampton Roads Env. Svcs, LLC: \$1750

Northern Lights, Inc: \$630.00

Ayers Marine Electronics: \$1738.00

2017 \$222,757.43

Reed Vrablitz – Port Engineer: Time and materials: \$2578.17

Trans Atlantic Diesels, Inc: \$179.26

Fairlead Boatworks: \$100,000.00 (New shafts, propellers, rudder, bushings and routine maintenance)

Western Branch Diesel: \$120,000.00 (Main engines removed, thoroughly rebuilt, Dyno tested and reinstalled)

2018 \$1,383.52

Reed Vrablitz – Port Engineer: Time and materials: \$375

Ayers Marine Electronics: \$348.52

Chesapeake Tree Services, LLC – Crane services: \$660

2019 \$140

John Bauer Plumbing: \$140

2020 \$6648

Arc Angel: \$6000

Virginia Diesel: \$648

2021

2022

2023 \$10,555.07

Fairlead Boatworks – Repairs & Maintenance: \$10,555.07

2018 – August 2023: Ampro Shipyard & Diesel: \$78,450.00

June 2021 – August 2023: Virginia Diesel, Inc.: \$25,500.00

TOTAL: \$771,645.93

While tied up/out of service, the *Jacqueline A* was routinely started and run every 8 weeks.



PLATE THICKNESS/CORROSION SURVEY UT REPORT
For Use with Procedure ASI - NDT- 004

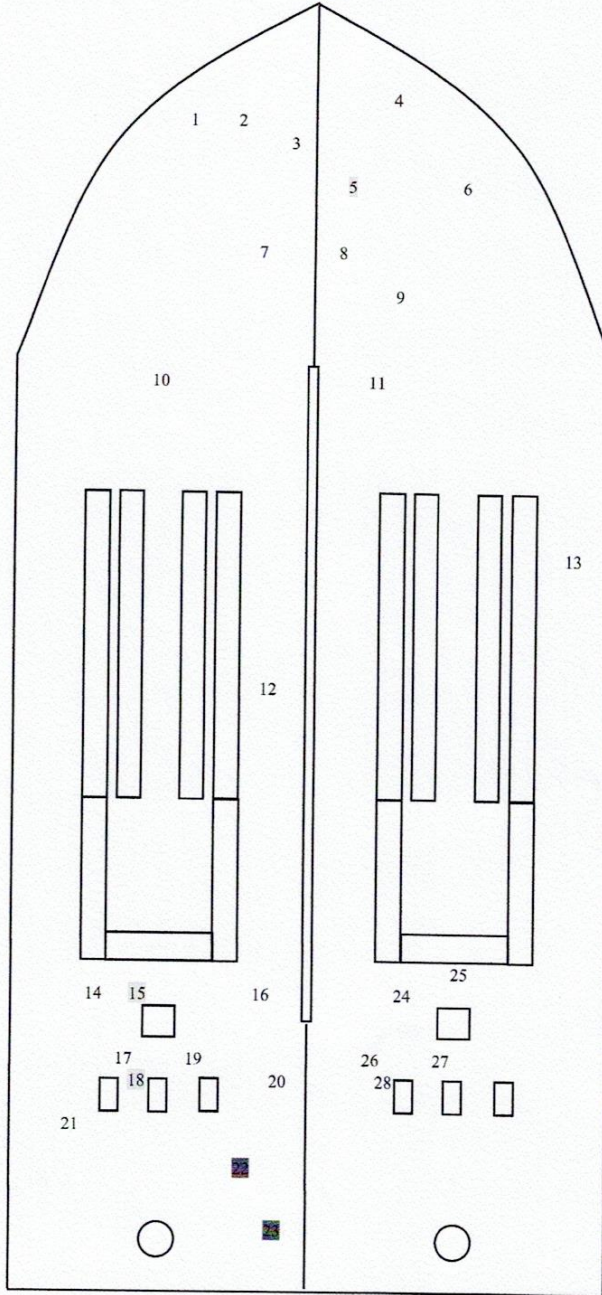
DATE: 15 March 2023		CONTACT PERSON: John M Ward		PAGE: 1	OF: 11
SHIP/HULL#: Jacqueline A (Tug)		WORK ITEM #: N/A		CUSTOMER: Bay Freight Inc.	
DRAWING #: N/A		PARAGRAPH#: Multi		PO#: Check	
PART IDENTIFICATION: Multi		LOCATION: Hull Bottom, Side Shell, Main Deck & Stern Tubes		COUPLANT: Ultra Gel II	
SYSTEM/COMPONENT: Structural		ACCEPTANCE/CLASS: N/A		SCAN TYPE: A-SCAN	
DESCRIPTION OF TASK: Ultrasonic Thickness Inspection of Suspect Areas (Pitting) on Hull Bottom, Decking, Side Shell Plating & Stern Tubes as directed.					
INSTRUMENT: OLYMPUS		CAL BLOCK #: PWT-STD-159		TRANSDUCER: D7906-SM	
MODEL: 38 DL PLUS		CAL BLOCK MAT: STEEL		TRANSDUCER SERIAL #: 1042259	
INSTRUMENT SERIAL #: ASI-OLM-002		GAIN: 68 dB		TYPE: DUAL	
				ANGLE: STRAIGHT BEAM	
INSTRUMENT CAL DUE DATE: 31 July 2023		SIZE: 0.434		FREQUENCY: 5 MHz	
COMMENTS:					
Note: Original Thickness derived from surveyors estimate as a result of not being provided arrangement drawings etc. ASI places no warranty on original thickness estimations					
INSPECTORS SIGNATURE: [Redacted]		Date: 16 March 2023		REVIEW SIGNATURE: [Redacted]	
PRINT: Nick Imbrigiotta		Level: II		PRINT: Stan Meyer	
				Date: 16 March 2023	
				Title: QAD	

AUXILIARY SYSTEMS INC


PLATE THICKNESS/CORROSION SURVEY UT REPORT DRAWING


SYSTEM: Hull, Sideshell, and Structure	DATE: 15 March 2023	PAGE: 2	OF 11
SHIP/HULL#: Jacqueline A (Tug)	WORK ITEM #: N/A	PARAGRAPH #: N/A	

Hull Bottom
SUSPECT AREAS – PITTING
(looking down)



--- = Weld Seam

 = 25% + Loss

 = 18.75-25% Loss

Fwd

Port ← → Stbd

Aft

AUXILIARY SYSTEMS INC

PLATE THICKNESS/CORROSION SURVEY UT REPORT DRAWING

SYSTEM: Hull, Sideshell, and Structure

DATE: 15 March 2023

PAGE: 3

OF

11

SHIP/HULL#: Jacqueline A (Tug)

WORK ITEM #: N/A

PARAGRAPH #:

N/A

AREA OF INSPECTION	ORIGINAL THICKNESS (in)	ACTUAL THICKNESS (in)	DIM (in)	DIM (%)	MAX ALLOW DIM (in)	MAX ALLOW DIM (%)	COMMENTS
Hull Bottom							
SUSPECT AREAS – PITTING							
1	0.375	0.381	0.000	0.0%	0.094	25%	Hull Bottom – Pitted Area
2	0.375	0.356	0.019	5.1%	0.094	25%	Hull Bottom – Pitted Area
3	0.375	0.325	0.050	13.3%	0.094	25%	Hull Bottom – Pitted Area
4	0.375	0.313	0.062	16.5%	0.094	25%	Hull Bottom – Pitted Area
5	0.375	0.296	0.079	21.1%	0.094	25%	Hull Bottom – Pitted Area
6	0.375	0.381	0.000	0.0%	0.094	25%	Hull Bottom – Pitted Area
7	0.375	0.349	0.026	6.9%	0.094	25%	Hull Bottom – Pitted Area
8	0.375	0.386	0.000	0.0%	0.094	25%	Hull Bottom – Pitted Area
9	0.375	0.353	0.022	5.9%	0.094	25%	Hull Bottom – Pitted Area
10	0.375	0.368	0.007	1.9%	0.094	25%	Hull Bottom – Pitted Area
11	0.375	0.388	0.000	0.0%	0.094	25%	Hull Bottom – Pitted Area
12	0.375	0.356	0.019	5.1%	0.094	25%	Hull Bottom – Pitted Area
13	0.375	0.379	0.000	0.0%	0.094	25%	Hull Bottom – Pitted Area
14	0.500	0.456	0.044	8.8%	0.125	25%	Hull Bottom – Pitted Area
15	0.500	0.376	0.124	24.8%	0.125	25%	Hull Bottom – Pitted Area
16	0.500	0.491	0.009	1.8%	0.125	25%	Hull Bottom
17	0.500	0.461	0.039	7.8%	0.125	25%	Hull Bottom – Pitted Area
18	0.500	0.395	0.105	21.0%	0.125	25%	Hull Bottom – Pitted Area
19	0.500	0.499	0.001	0.2%	0.125	25%	Hull Bottom – Pitted Area
20	0.500	0.441	0.059	11.8%	0.125	25%	Hull Bottom – Pitted Area
21	0.500	0.468	0.032	6.4%	0.125	25%	Hull Bottom – Pitted Area
22	0.500	0.328	0.172	34.4%	0.125	25%	Hull Bottom – Pitted Area
23	0.500	0.351	0.149	29.8%	0.125	25%	Hull Bottom – Pitted Area
24	0.500	0.501	0.000	0.0%	0.125	25%	Hull Bottom
25	0.500	0.419	0.081	16.2%	0.125	25%	Hull Bottom – Pitted Area
26	0.500	0.476	0.024	4.8%	0.125	25%	Hull Bottom – Pitted Area
27	0.500	0.472	0.028	5.6%	0.125	25%	Hull Bottom – Pitted Area
28	0.500	0.447	0.053	10.6%	0.125	25%	Hull Bottom – Pitted Area

AUXILIARY SYSTEMS INC

PLATE THICKNESS/CORROSION SURVEY UT REPORT DRAWING

SYSTEM: Hull, Sideshell, and Structure

DATE: 15 March 2023

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SHIP/HULL#: Jacqueline A (Tug)

WORK ITEM #: N/A

PARAGRAPH #:

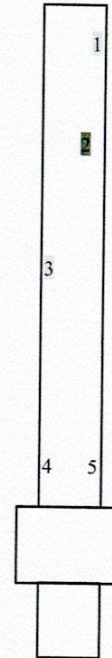
N/A

Stern Tubes
SUSPECT AREAS – PITTING
(looking down)

PORT SIDE
(looking down)





STBD SIDE
(looking down)

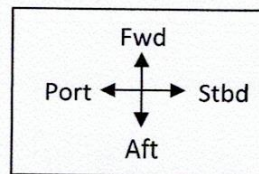


C/L

----- = Weld Seam

 = 25% + Loss

 = 18.75-25% Loss



AUXILIARY SYSTEMS INC

PLATE THICKNESS/CORROSION SURVEY UT REPORT DRAWING

SYSTEM: Hull, Sideshell, and Structure	DATE: 15 March 2023	PAGE: 5	OF 11
SHIP/HULL#: Jacqueline A (Tug)	WORK ITEM #: N/A	PARAGRAPH #: N/A	

AREA OF INSPECTION	ORIGINAL THICKNESS (in)	ACTUAL THICKNESS (in)	DIM (in)	DIM (%)	MAX ALLOW DIM (in)	MAX ALLOW DIM (%)	COMMENTS
Stern Tubes PORT SIDE SUSPECT AREAS – PITTING							
1	0.560	0.557	0.003	0.5%	0.140	25%	Port Side Stern Tube
2	0.560	0.449	0.111	19.8%	0.140	25%	Port Side Stern Tube
3	0.560	0.430	0.130	23.2%	0.140	25%	Port Side Stern Tube
4	0.560	0.326	0.234	41.8%	0.140	25%	Port Side Stern Tube
5	0.560	0.564	0.000	0.0%	0.140	25%	Port Side Stern Tube

AREA OF INSPECTION	ORIGINAL THICKNESS (in)	ACTUAL THICKNESS (in)	DIM (in)	DIM (%)	MAX ALLOW DIM (in)	MAX ALLOW DIM (%)	COMMENTS
Stern Tubes STBD SIDE SUSPECT AREAS – PITTING							
1	0.500	0.386	0.114	22.8%	0.125	25%	Stbd Side Stern Tube
2	0.500	0.294	0.206	41.2%	0.125	25%	Stbd Side Stern Tube
3	0.500	0.381	0.119	23.8%	0.125	25%	Stbd Side Stern Tube
4	0.500	0.500	0.000	0.0%	0.125	25%	Stbd Side Stern Tube
5	0.500	0.437	0.063	12.6%	0.125	25%	Stbd Side Stern Tube

AUXILIARY SYSTEMS INC

PLATE THICKNESS/CORROSION SURVEY UT REPORT DRAWING

SYSTEM: Hull, Sideshell, and Structure

DATE: 15 March 2023

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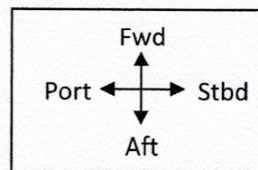
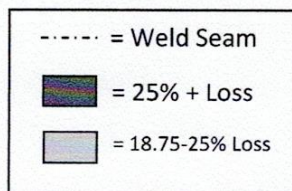
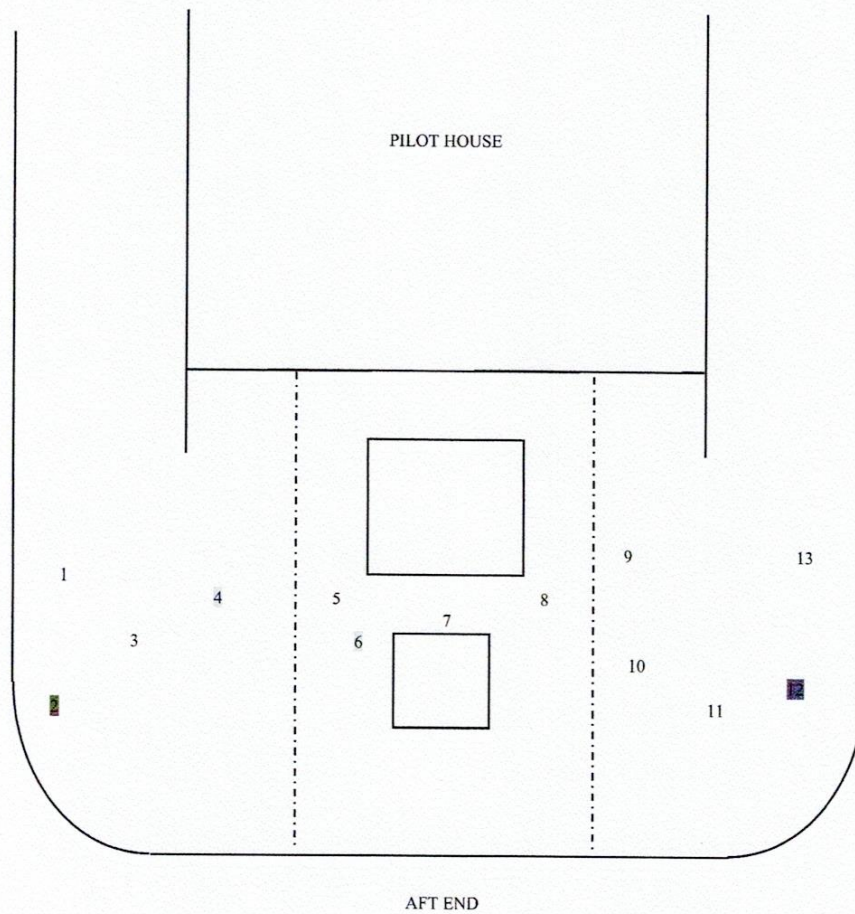
SHIP/HULL#: Jacqueline A (Tug)

WORK ITEM #: N/A

PARAGRAPH #:

N/A

Main Decking
SUSPECT AREAS – PITTING
(looking down)



AUXILIARY SYSTEMS INC

PLATE THICKNESS/CORROSION SURVEY UT REPORT DRAWING

SYSTEM: Hull, Sideshell, and Structure	DATE: 15 March 2023	PAGE: 7	OF 11
SHIP/HULL#: Jacqueline A (Tug)	WORK ITEM #: N/A	PARAGRAPH #: N/A	

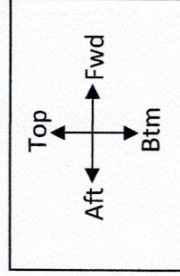
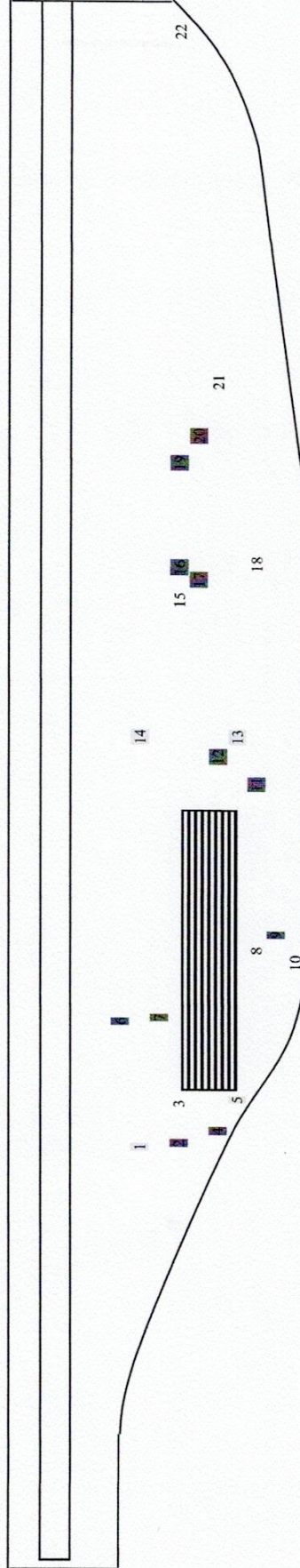
AREA OF INSPECTION	ORIGINAL THICKNESS (in)	ACTUAL THICKNESS (in)	DIM (in)	DIM (%)	MAX ALLOW DIM (in)	MAX ALLOW DIM (%)	COMMENTS
Main Decking							
SUSPECT AREAS – PITTING							
1	0.313	0.286	0.027	8.6%	0.078	25%	Main Decking – Pitted Area
2	0.313	0.211	0.102	32.6%	0.078	25%	Main Decking – Pitted Area
3	0.313	0.303	0.010	3.2%	0.078	25%	Main Decking
4	0.313	0.237	0.076	24.3%	0.078	25%	Main Decking – Pitted Area
5	0.313	0.279	0.034	10.9%	0.078	25%	Main Decking – Pitted Area
6	0.313	0.243	0.070	22.4%	0.078	25%	Main Decking – Pitted Area
7	0.313	0.261	0.052	16.6%	0.078	25%	Main Decking – Pitted Area
8	0.313	0.276	0.037	11.8%	0.078	25%	Main Decking – Pitted Area
9	0.313	0.264	0.049	15.7%	0.078	25%	Main Decking – Pitted Area
10	0.313	0.264	0.049	15.7%	0.078	25%	Main Decking – Pitted Area
11	0.313	0.317	0.000	0.0%	0.078	25%	Main Decking
12	0.313	0.231	0.082	26.2%	0.078	25%	Main Decking – Pitted Area
13	0.313	0.259	0.054	17.3%	0.078	25%	Main Decking – Pitted Area

AUXILIARY SYSTEMS INC


PLATE THICKNESS/CORROSION SURVEY UT REPORT DRAWING

SYSTEM: Hull, Sideshell, and Structure	DATE: 15 March 2023	PAGE: 8	OF 11
SHIP/HULL#: Jacqueline A (Tug)	WORK ITEM #: N/A	PARAGRAPH #: N/A	

Side Shell Plating
STBD SIDE – PITTED AREAS
 (looking inboard)



----- = Weld Seam

 = 25% + Loss

 = 18.75-25% Loss

AUXILIARY SYSTEMS INC

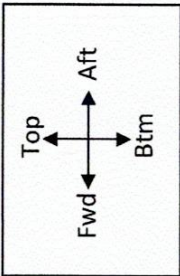
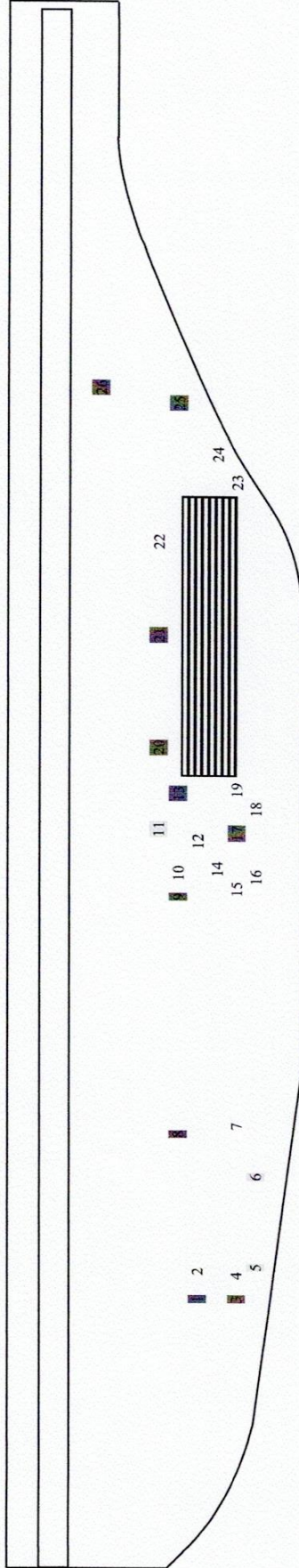
PLATE THICKNESS/CORROSION SURVEY UT REPORT DRAWING



SYSTEM: Hull, Sideshell, and Structure	DATE: 15 March 2023	PAGE: 9	OF 11
SHIP/HULL#: Jacqueline A (Tug)	WORK ITEM #: N/A	PARAGRAPH #: N/A	

AREA OF INSPECTION	ORIGINAL THICKNESS (in)	ACTUAL THICKNESS (in)	DIM (in)	DIM (%)	MAX ALLOW DIM (in)	MAX ALLOW DIM (%)	COMMENTS
Side Shell Plating							
STBD SIDE – PITTED AREAS							
1	0.375	0.301	0.074	19.7%	0.094	25%	Side Shell Plating – Pitted Area
2	0.375	0.265	0.110	29.3%	0.094	25%	Side Shell Plating – Pitted Area
3	0.375	0.336	0.039	10.4%	0.094	25%	Side Shell Plating – Pitted Area
4	0.375	0.255	0.120	32.0%	0.094	25%	Side Shell Plating – Pitted Area
5	0.375	0.290	0.085	22.7%	0.094	25%	Side Shell Plating – Pitted Area
6	0.375	0.221	0.154	41.1%	0.094	25%	Side Shell Plating – Pitted Area
7	0.375	0.255	0.120	32.0%	0.094	25%	Side Shell Plating – Pitted Area
8	0.375	0.341	0.034	9.1%	0.094	25%	Side Shell Plating – Pitted Area
9	0.375	0.262	0.113	30.1%	0.094	25%	Side Shell Plating – Pitted Area
10	0.375	0.315	0.060	16.0%	0.094	25%	Side Shell Plating – Pitted Area
11	0.375	0.263	0.112	29.9%	0.094	25%	Side Shell Plating – Pitted Area
12	0.375	0.258	0.117	31.2%	0.094	25%	Side Shell Plating – Pitted Area
13	0.375	0.300	0.075	20.0%	0.094	25%	Side Shell Plating – Pitted Area
14	0.375	0.284	0.091	24.3%	0.094	25%	Side Shell Plating – Pitted Area
15	0.375	0.334	0.041	10.9%	0.094	25%	Side Shell Plating – Pitted Area
16	0.375	0.251	0.124	33.1%	0.094	25%	Side Shell Plating – Pitted Area
17	0.375	0.201	0.174	46.4%	0.094	25%	Side Shell Plating – Pitted Area
18	0.375	0.361	0.014	3.7%	0.094	25%	Side Shell Plating – Pitted Area
19	0.375	0.249	0.126	33.6%	0.094	25%	Side Shell Plating – Pitted Area
20	0.375	0.225	0.150	40.0%	0.094	25%	Side Shell Plating – Pitted Area
21	0.375	0.305	0.070	18.7%	0.094	25%	Side Shell Plating – Pitted Area
22	0.375	0.316	0.059	15.7%	0.094	25%	Side Shell Plating – Pitted Area

AUXILIARY SYSTEMS INC			
PLATE THICKNESS/CORROSION SURVEY UT REPORT DRAWING			
SYSTEM: Hull, Sideshell, and Structure	DATE: 15 March 2023	PAGE: 10	OF 11
SHIP/HULL#: Jacqueline A (Tug)	WORK ITEM #: N/A	PARAGRAPH #: N/A	

Side Shell Plating
PORT SIDE – PITTED AREAS
 (looking inboard)



- - - - - = Weld Seam
 = 25% + Loss
 = 18.75-25% Loss

AUXILIARY SYSTEMS INC

PLATE THICKNESS/CORROSION SURVEY UT REPORT DRAWING

SYSTEM: Hull, Sideshell, and Structure	DATE: 15 March 2023	PAGE: 11	OF 11
SHIP/HULL#: Jacqueline A (Tug)	WORK ITEM #: N/A	PARAGRAPH #: N/A	

AREA OF INSPECTION	ORIGINAL THICKNESS (in)	ACTUAL THICKNESS (in)	DIM (in)	DIM (%)	MAX ALLOW DIM (in)	MAX ALLOW DIM (%)	COMMENTS
Side Shell Plating							
PORT SIDE – PITTED AREAS							
1	0.375	0.216	0.159	42.4%	0.094	25%	Side Shell Plating – Pitted Area
2	0.375	0.314	0.061	16.3%	0.094	25%	Side Shell Plating – Pitted Area
3	0.375	0.251	0.124	33.1%	0.094	25%	Side Shell Plating – Pitted Area
4	0.375	0.318	0.057	15.2%	0.094	25%	Side Shell Plating – Pitted Area
5	0.375	0.283	0.092	24.5%	0.094	25%	Side Shell Plating – Pitted Area
6	0.375	0.300	0.075	20.0%	0.094	25%	Side Shell Plating – Pitted Area
7	0.375	0.381	0.000	0.0%	0.094	25%	Side Shell Plating – Pitted Area
8	0.375	0.281	0.094	25.1%	0.094	25%	Side Shell Plating – Pitted Area
9	0.375	0.281	0.094	25.1%	0.094	25%	Side Shell Plating – Pitted Area
10	0.375	0.308	0.067	17.9%	0.094	25%	Side Shell Plating – Pitted Area
11	0.375	0.284	0.091	24.3%	0.094	25%	Side Shell Plating – Pitted Area
12	0.375	0.318	0.057	15.2%	0.094	25%	Side Shell Plating – Pitted Area
13	0.375	0.278	0.097	25.9%	0.094	25%	Side Shell Plating – Pitted Area
14	0.375	0.315	0.060	16.0%	0.094	25%	Side Shell Plating – Pitted Area
15	0.375	0.366	0.009	2.4%	0.094	25%	Side Shell Plating – Pitted Area
16	0.375	0.384	0.000	0.0%	0.094	25%	Side Shell Plating – Pitted Area
17	0.375	0.269	0.106	28.3%	0.094	25%	Side Shell Plating – Pitted Area
18	0.375	0.312	0.063	16.8%	0.094	25%	Side Shell Plating – Pitted Area
19	0.375	0.306	0.069	18.4%	0.094	25%	Side Shell Plating – Pitted Area
20	0.375	0.264	0.111	29.6%	0.094	25%	Side Shell Plating – Pitted Area
21	0.375	0.279	0.096	25.6%	0.094	25%	Side Shell Plating – Pitted Area
22	0.375	0.305	0.070	18.7%	0.094	25%	Side Shell Plating – Pitted Area
23	0.375	0.317	0.058	15.5%	0.094	25%	Side Shell Plating – Pitted Area
24	0.375	0.328	0.047	12.5%	0.094	25%	Side Shell Plating – Pitted Area
25	0.375	0.267	0.108	28.8%	0.094	25%	Side Shell Plating – Pitted Area
26	0.375	0.245	0.130	34.7%	0.094	25%	Side Shell Plating – Pitted Area

END OF REPORT

Attachment B

CERTIFICATE OF MANUFACTURE OF AN INFLATABLE LIFERAFTSales Order Number: SO2301874Customer: VANE BROS. MARINE SAFETY1. **Inflatable Liferaft Type:** SurvitecZodiac TO - 2 Year First Service **Serial Number:** 5132610500371For 4 persons manufactured in accordance with Part Number: 51326001 Issue: 004In accordance with Equipment Schedule Number: D00300019905 Equipment Schedule Issue Number: 0

Has been manufactured at:

Survitec - Survitec Group Limited trading as DBC Marine Safety Systems Limited, 1689 Cliveden Avenue Delta V3M 6V5 Canada

2. (a) Complete and operationally packed
(b) ~~Complete but not operationally packed~~
(c) ~~Not operationally packed and supplied without these items:~~
Pyrotechnics / Rations / Water / First Aid Kit / Gas Charge / Gas Cylinder / Other:
(d) ~~Not operationally packed but materially complete~~
(e) ~~Not operationally packed Extended Service Liferaft in accordance with Service Bulletin 73/13 (latest revision)~~
(f) ~~Not operationally packed Extended Service Liferaft~~

Container / Valise: Container Container Type: MKI8 SIZE 1 Container Serial Number(s): 22180100056, 22180100056Emergency Pack Type: A Max. Installation Height: 18 mIncluding an ~~EPiRB / SART / VHF / PLB / Radar Reflector / Other:~~3. Special additional requirements: USCG APPROVAL NO.160.051/273/3 LOT NO.SBT1972Date of Manufacture: Apr 2022Liferaft to be serviced not later than: 13 Jun 2025

Signed:



(Approved signatory on behalf of Survitec Group Ltd).

4. **Note:-** In case of 2(b), (c), (d) (e) and/or (f), before release, and in order to comply with the foregoing declaration, the raft is to undergo final packing/inspection in accordance with the appropriate service manual by an approved service station to certify this raft as complete and operationally packed.

Signed:

Approved signatory for final packing / inspection on behalf of:

Date of Final Packing / Inspection: N/ALiferaft to be serviced not later than: N/AA list of World Wide Service Stations may be obtained from our website: www.dbcmarine.comQAF 237
Rev 008
MAY 2019