

- HULL AND MACHINERY SURVEYS
- CARGO SURVEYS
- PRELIMINARY PLANS & DESIGNS
- ULTRASONIC GAUGING
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- WATERFRONT FACILITIES
- APPRAISALS



- ACCREDITED CRANE & DERRICK CERTIFICATION 29 CFR PART 1919
- FLOATING CRANES & DERRICKS
- ON-BARGE LOAD CHARTS
- VESSEL STABILITY
- SHIP, TUG & BARGE PROCEDURES MANUALS

COLLETTI MARINE SURVEYORS & CRANE INSPECTIONS
 MARINE ENGINEERS • SURVEYORS
 944 WESTERN AVE. HICKORY, PA 15340 • PH: [REDACTED] • FAX: [REDACTED]
 [REDACTED]

Report No. 3-2-18
 Damage Survey

Pittsburgh, Pennsylvania
 February 3, 2018



This is to certify that the undersigned surveyor did, at the request of Mr. Neil Anderson, for the account to US Army Corps. of Engineers, Pittsburgh District, attend the 39' Aluminum SeaArk transporter work boat, Hull Identification Number, SAMA1137G000 as she lay on blocks at Emsworth Lock and Dam, Emsworth, Pennsylvania on the 3rd day of February 2018, in order to determine the nature and extent of damage to the work boat after an alision occurred with a barge due to a barge breakaway on January 13th 2018.

IN ATTENDANCE: Mr. Ryan Kinneman - U.S. Army Corps of Engineers, Asst. Lockmaster

BRIEF DESCRIPTION:

This 39' custom built, all aluminum, all welded, work boat was built by a reputable aluminum boat builder; SeaArk Boat Company. She has a flat bottom and raked bow. She has three water tight compartments and is longitudinally framed. She was designed and built for the USACE Ohio river maintenance/ facility operations. She was found hauled out and on blocks next to the operations office. She is heavily damaged, but appeared well maintained prior to the loss.

Fitted out to include, but not limited to:

1. Furuno Radar
2. Cockpit heating
3. 110 volt AC power for davit winch and spotlight etc.
4. Promatic 50 amp marine battery charger
5. Full engine instrumentation- local and remote
6. Twin search lights
7. Work flood lights
8. Twin float actuated bilge pumps with alarms
9. Engine block heaters
10. Rudder angle indicator
11. Bow mounted jib w/ electric winch for buoy tending
12. Hydraulic trim tabs

VESSEL PARTICULARS:

Hull Identification Number: SAMA1137G000

Registration Number: None

Dimensions: 39' x 14' x 5'

Manufacturer: SeaArk - Monticello, Arkansas

Model: Custom Built, 39' Transporter

Date of Manufacture: 2000

Route/Service: Ohio River/Protected waters

Propulsion: Twin, 8-cylinder Caterpillar 3208 Naturally Aspirated Diesel Engines (210 hp. each)

Engine Hours: 1393 and 1397

Drives: Twin inboard, fitted with 4 bladed nibral bronze 22" props.

BRIEF BACKGROUND

It has been reported that on the 13th of January 2018, at approximately 0600, 20 loaded coal and cement jumbo hopper barges broke loose from their fleeting cells at Jacks Run, mile point 4, on the Ohio River, which is upriver a few miles and came to rest on the Emsworth lock and dam. Many of them sank at the foot of the eight lock gates. A barge, weighing 400 tons, with over 1000 tons of cargo, hit the two USACE aluminum work boats. The USACE had them tied up along the small lock chamber wall in a small recessed area at the foot of the dam. The alision of the barge and two work boats drove the two boats into one another. This work boat vessel, in turn, was driven into a concrete pier of No. 1 gate - heavily crushing the bow and stern transom.

DAMAGE FINDINGS:

Port Side:

Port corner found 12" split at corner/rake knuckle 2' below the bow.
Port sideshell found set in 0-2" from the bow extending aft 10' over a 10' x 5' area.
Port bow timberhead found set over.
Sideshell rubber rub bar/fender found damaged and displaced over a 3' length
Bilge knuckle found split at weld seam 6' aft of bow, extending aft 5'
3" diameter hole found in bottom plate, 13' forward of transom and 3" inbd. of bilge knuckle.

Starboard Side:

Starboard bow rake and bottom hull plate found heavily crushed, holed and set in 0-10'.
Starboard foredeck found set down 0-2' over a 10' x 6' area.
All internals to conform with external damage.

Transom:

Transom (14' x 5') found set in 0-3' and heavily crushed and holed to starboard side.
All internals found to conform.

Bottom:

Found set up 0-2', just forward of transom over entire 15' width.
Starboard rudder/rudder stock found laid over 8"

Deck:

Stern deck above transom found set down and crushed 0-1' over entire width.
Aft railing found laid over and stanchion welds found torn at deck connection.

Engine Space:

A tide mark in engine space indicates there was 12-16 "of water in the bilges at the time of salvage.

List of Internal framing specifications:

Longitudinal Deck framing: 2"x 2" on 12" centers
Sideshell Longitudinal Framing: 2" x 2" on 12" centers
Stanchions: 2" diameter tubing on 36" spacing
Floor Frames: 2' x 6" on 24" centers
Floor Transverse Frames: 2" x 4" on 36" centers
Hull Plating: 1/4" plate thickness
Substantial damage was observed to the following:

Hydraulic Steering system components
Fuel tank mounts
Engine exhaust piping

Engine bed frames
Engine shaft seals
Various electrical wire runs
Water tight bulkheads

The main propulsion engines and drives are likely salvageable, but for the broken exhaust manifold riser on the stbd. engine. Running them, although impossible at this point, would be the only way to verify their soundness for certain.

EXTENT OF THE LOSS

Due to the extent of hull and internal damage to the vessel and her systems, it is the undersigned's opinion, this vessel is a constructive total loss.

Salvage Scrap Value Discussion:

Aluminum scrap value: .55 cents per pound.

Estimated scrap weight of vessel: 8,500 pounds = \$4,675.00

Engines and drives: \$7,000.00 per unit

Total Scrap Value: \$ 18,675.00

PRE-LOSS VALUATION DISCUSSION

Depreciation Calculator

Result

With straight line method, the depreciation per year is **\$7,341**.

	Beginning Year Book Value	Depreciation Percent	Depreciation Amount	Accumulated Depreciation Amount	Ending Book Value
1.	\$202,212	4.00%	\$7,341	\$7,341	\$194,871
2.	\$194,871	4.00%	\$7,341	\$14,682	\$187,530
3.	\$187,530	4.00%	\$7,341	\$22,023	\$180,189
4.	\$180,189	4.00%	\$7,341	\$29,364	\$172,848
5.	\$172,848	4.00%	\$7,341	\$36,705	\$165,507
6.	\$165,507	4.00%	\$7,341	\$44,046	\$158,166
7.	\$158,166	4.00%	\$7,341	\$51,387	\$150,825
8.	\$150,825	4.00%	\$7,341	\$58,728	\$143,484
9.	\$143,484	4.00%	\$7,341	\$66,069	\$136,143
10.	\$136,143	4.00%	\$7,341	\$73,410	\$128,802
11.	\$128,802	4.00%	\$7,341	\$80,751	\$121,461
12.	\$121,461	4.00%	\$7,341	\$88,092	\$114,120
13.	\$114,120	4.00%	\$7,341	\$95,433	\$106,779

14.	\$106,779	4.00%	\$7,341	\$102,774	\$99,438
15.	\$99,438	4.00%	\$7,341	\$110,115	\$92,097
16.	\$92,097	4.00%	\$7,341	\$117,456	\$84,756
17.	\$84,756	4.00%	\$7,341	\$124,797	\$77,415
18.	\$77,415	4.00%	\$7,341	\$132,138	\$70,074

Accurate appraisal values take factors such as the above into consideration (in addition to the vessel's overall condition) and rely to an extent on knowledge of recreational vessels and the boat building industry. As such, the estimated value cannot be correlated with any central bank, listing service, government or local agencies, records, etc.

Following this visit to the boat, the undersigned researched the values of this same boat and other similar boats in the marine periodicals and on-line. (See Below) Based on this and the undersigned's firsthand knowledge of small vessels, her low engine hours/condition, how she is fitted out, the reputation of the builder, and the present boat market conditions in this area.

Therefore, it is the undersigned's opinion that this boat has a pre-loss current fair market value of approximately: \$75,000.00 - \$85,000.00

STATEMENT OF VALUATION:

The "**FAIR MARKET VALUE**" is the most probable price in terms of money which a vessel should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller, each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby: a. Buyer and seller are typically motivated. b. Both parties are well informed or well advised, and each acting in what they consider their own best interest. c. A reasonable time is allowed for exposure in the open market. d. Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and e. The price represents a normal consideration for the vessel sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

Disclaimer:

- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, unbiased professional analyses, opinions, and conclusions.
- I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
- I have performed no services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
- I have no personal bias with respect to the property that is the subject of this report to the parties involved with this assignment.

- My engagement in this assignment was not contingent upon developing or reporting predetermined results.
- My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- No one provided significant professional assistance to the person signing this report

INSPECTION MADE WITHOUT PREJUDICE TO THE RIGHTS AND OR INTERESTS OF
ANY PARTY OR POLICY OF INSURANCE.

[REDACTED]

Marine Engineer
Certified Marine Surveyor- (NAMS 138-861)
ABYC Certified Gas Engine Technician



SEE COMPS. BELOW



1990 50'x 14' Ex-Navy Cargo/Push Boat

PRICE: \$60,000 USD

- 3' draft
- Cargo area 22' x 12'
- Steel hull
- Powered by two GM 671 Detroit naturals with Allison gears
- Engines have less than 400 hours
- 2" Shafts
- Wheelhouse is removable for transport
- Hull in good condition
- No generator
- Fuel capacity – 500 gal

Located in Mississippi

Details are deemed to be correct but are not guaranteed and should be independently verified.

Please [contact](mailto:sms@scrutonmarine.com) us for further information sms@scrutonmarine.com

Scruton Marine Services Phone 519-583-1636 Fax 519-583-2189

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[REDACTED]

January 30, 2018

Subject: Survey Quote for US Army Corps. damaged work boats – Emsworth Lock and Dam

Attn: Mr. Neil Anderson

I appreciate you considering us. With a combined marine experience of 60 years between dad and myself, we are confident that we will provide you with superior services.

We propose to conduct the surveys on the below captioned vessels for the following fee.

Conduct two Condition and Valuation Surveys on damaged aluminum SeaArk work boats

Proposed Fee: \$1500.00

We can begin the inspections early next.

We look forward to being of service.

Regards,

[REDACTED]

Steve Colletti
Colletti Marine Surveyors & Crane Inspections Inc.
Marine Engineer
Accredited NAMS Marine Surveyor
Certified Crane Inspector- Crane Institute 2015



DEPARTMENT OF THE ARMY
PITTSBURGH DISTRICT, CORPS OF ENGINEERS
WILLIAM S. MOORHEAD FEDERAL BUILDING
1000 LIBERTY AVENUE
PITTSBURGH, PA 15222-4186

REPLY TO
ATTENTION OF

Technical Support Branch – Maintenance Section

February 2, 2018

Steve Colletti
Colletti Marine Surveyors &
Crane Inspections Inc.
944 Western Ave
Hickory, PA 15340

Dear Mr. Colletti:

This letter is to confirm the Corps of Engineers acceptance of your proposal to conduct two condition and valuation surveys to our damaged aluminum SeaArk work boats for \$1,500.00. You are hereby directed to proceed with the surveys. A check for \$1,500.00 for your services is enclosed.

Please coordinate your inspection schedule with Mr. Mark Pahlman, Lockmaster, Emsworth Locks and Dam at [REDACTED], and submit a final copy of your reports to me at the above address.

Sincerely,

[REDACTED]
Neil Anderson, P.E.
Facility Maintenance Manager
Operations Division, Pittsburgh District
U.S. Army Corps of Engineers
Ph: [REDACTED]
Mobile: [REDACTED]