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October 21, 2020

CONDITION AND VALUATION SURVEY / APPRAISAL REPORT
VESSEL: "PITTSBURG"
File No. 20040

BOPC RECEIVED
12/1/2020

This report is issued in accordance with the terms and conditions attached as enclosure #2

This is to certify that the undersigned Marine Surveyor did on September 3, 2020, acting at the request of Mr. Jason Covell, attend on board the P/V "PITTSBURG," while at Pittsburg Marina, Pittsburg, California, for the purpose of performing a Condition and Valuation Survey. At the time of survey the vessel was afloat.

The reason for the above listed attendance was to perform a Condition and Valuation Survey. The purpose of the survey was for establishing the general condition of the vessel, as well as the Fair Market Value (FMV) and Replacement Cost New (RCN).

The intended user of the survey is San Francisco Bar Pilots, The California Pilot's Commission, and the vessel's hull underwriters.

SCOPE OF WORK FOR APPRAISAL

As part of the appraisal process I inspected the vessel at the Pittsburg Marina, Pittsburg, California, while the vessel was afloat.

I investigated the value of the vessel based upon the definition of values listed above.

Sales Comparison (Market) Approach, Cost Comparison Approach, and Income Approach were considered. No information regarding the vessel's income was provided so this approach could not be used. This vessel is a specialized type of vessel with few, if any, comparable vessels available for developing valuation based upon the market approach. The cost approach was used to determine the opinion of value.

The scope of work is further detailed in the appraisal section of the report contained on pages 8-11.

GENERAL INFORMATION

1.	*Client:*	San Francisco Bar Pilots
2.	*Vessel Name:*	"PITTSBURG"
3.	*Official Number:*	922579
4.	*Hull Identification No. (HIN)*	ALF00494G787
5.	*Owner:*	San Francisco Bar Pilots
6.	*Address:*	Pier 9 East End San Francisco, CA 94111
7.	*Home Port:*	San Francisco, CA
8.	*Gross Tons:*	18
9	*Net Tons:*	14
10.	*Builder:*	Munson Marine Edmonds, WA
11.	*Year Built / Rebuilt*	1987 / 2014
12.	*Intended Service:*	Inland pilot boat
13.	*Cruising Speed/ Range:*	25 kts./ 875 NM (8 GPH fuel burn and 20% fuel reserve assumed)
14.	*Last Dry Docking:*	Feb. 2020 for hull repairs due to a reported allision with a buoy. Bottom paint also done.
15.	*Conversions/ Modifications:*	In 10/2014 the vessel underwent extensive rebuilding, including the following items: Two new Volvo Penta D4-225A-F engines (US EPA Tier 3 compliant) and two new Volvo Penta TSK DPH-C outdrives were installed. Fixed trim plates were removed and Volvo Penta Interceptor adjustable trim plates were installed. Hull was blasted to bare metal. Existing D-rubber sheer fender was removed. Sheer was reinforced with a 5" x ¼" flat bar doubler plate. Hull recoated with 2 coats of epoxy and 2 coats of anti-fouling paint. Topsides hull was recoated with Awl Grip linier polyurethane. Deck and cabin was sanded and recoated with Awl Grip linier polyurethane. In 2017 hull and house were spot painted and new bottom paint applied. In 6/2018 new non-skid deck coating was applied.

Conversions/ Modifications (continued):	In 2019 the vessel was hauled out for outdrive service and installation of new trim tabs. In 2020 the vessel was hauled out for hull repairs to the bow plating and bottom painting.

VESSEL PARTICULARS

1.	*Length Over All:*	36'
2.	*Registered Length:*	35.2'
3.	*Beam:*	12.6'
4.	*Draft:*	4'
5.	*Depth:*	6.2'
6.	*Shell Plate:*	¼" Welded aluminum plate
7.	*Superstructure:*	3/16" Welded aluminum plate

GENERAL DESCRIPTION AND ARRANGEMENT

The subject vessel is an all welded aluminum hull pilot vessel with twin Volvo Penta diesel engine propulsion through Volvo Penta stern drives.

There is an open foredeck with diamond plate with non-skid coating applied, followed by a low deckhouse and an open aft deck. There are heavy pipe handrails surrounding the foredeck and leading aft forming grab rails along the house. The aft deck is surrounded by rails.

The bow is scow shaped and the slab sides forward form a hard chine creating a spray rail. The underbody hull has a fine entry forming a shallow keel with moderate deadrise. The transom is nearly flat and has bars across to protect the stern drives.

There is an emergency retrieval system on the port side operated by a 12VDC winch and equipped with a davit for personnel retrieval.

The interior is laid out as follows:
Forepeak separated by collision bulkhead with freeman hatch.
(2) Bunks forward.
Main cabin with (4) aircraft type seats helm to port forward and fuel tanks beneath sole.

PROPULSION

1.	*Number Of Engines:*	Two
2.	*Fuel:*	Diesel
3.	*Make/Model:*	Volvo Penta D4-226A-F tier III 2014 model
4.	*Total Horsepower:*	450
5.	*Port Serial Numbers:*	A314796
6.	*Starboard Serial Numbers:*	A308510
7.	*Port Engine Hours:*	2056.0
8.	*Starboard Engine Hours:*	2066.0
9.	*Cooling:*	Fresh water through heat exchanger
10.	*Exhaust:*	Wet out stern drives
11.	*Starting:*	12V DC
12.	*Reverse/Reduction Gear:*	Volvo Penta DPH-C stern drives
13.	*Engine/Gear Foundations:*	Integral welded aluminum girders

ELECTRICAL SYSTEM

1.	*AC System Description:*	There is a shore power plug on the aft deck. The main 30-amp breaker is located in a panel at the helm. There are four 15-amp breakers for the AC circuits. Shore power is the only source of AC power in the vessel.
2.	*DC System Description:*	There are two 8-D size 12V DC wet cell batteries in two 12V DC banks charged by either the engine driven alternators or a Powermania Turbo M220 battery charger. There are rotary parallel disconnect switches in the engine room and breakers in the pilothouse.

MISCELLANEOUS EQUIPMENT AND SYSTEMS

1.	*Marine Sanitation Device:*	None
2.	*Bilge Pumps/Piping:*	(2) Rule 3500 with automatic switch main cabin and engine room (engine room bilge pump new in 5/2014)
3.	*Bilge Pumps Tested:*	Yes
4.	*Domestic Water System:*	N/A
5.	*Ventilation:*	Natural and 12V DC
6.	*Lpg System:*	N/A
7.	*Lpg System Meet Governing*	N/A

	Standards:	
8.	*HVAC Systems:*	12V Dc hot water system
9.	*Alarms:*	• Main engines are equipped with the engine manufacturer's alarm package. • Engine room high bilge level connected to ringer/strobe (tested).

Miscellaneous Equipment And Systems Comments:

The cabin bilge pump discharge is installed about 18" above the static waterline. However the vessel operator reports that in rough weather water flows down through the discharge and into the bilge (see Findings and Recommendations).

STEERING SYSTEM

1.	*Number Of Stations:*	One
2.	*Description/Type Of Equipment:*	Low pressure helm pump to power assisted hydraulic steering integral to outdrives

CORROSION CONTROL

1.	*Zincs:*	On transom and outdrives
2.	*Condition:*	Unknown; underwater body not inspected
3.	*Bonding System:*	N/A
4.	*Other:*	Electroguard / Mercathode impressed current system

THROUGH HULL FITTINGS

There are no through hull fittings installed below the static waterline. Both bilge pump discharges were at least 18" above the static waterline.

TANKAGE

1.	*Fuel Tanks:*	Two (100 g fwd; 250 g aft)
2.	*Total Capacity:*	350
3.	*Material:*	Integral welded aluminum
4.	*Grounding:*	Yes
5.	*Shut Off Valves:*	N/A
6.	*Vents:*	Yes
7.	*Vent Screens:*	Yes

GROUND TACKLE

1.	*Anchors:*	20# Danforth type emergency anchor with 150' 5/8" nylon rode and 10' of 3/8' galvanized chain (lengths estimated)

FIRE AND SAFETY

1.	*No. Portable Extinguishers:*	(2)
2.	*Type/Size:*	B-1 Halon
3.	*Date Last Inspection:*	9/27/2019 (see Findings and Recommendations)
4.	*Type Of Fixed System And Size:*	Halon FE241 425ft^3
5.	*Approximate Size Of Engine Space*	Less than 425ft^3
6.	*Date Last Inspection:*	9/27/2019 (see Findings and Recommendations)
7.	*Fire Main, Hose, Nozzle*	N/A
8.	*Fire Axe:*	N/A
9.	*Number/Type Pfds:*	(3) USCG Type V; (4) USCG Type I; (3) exposure suits; (2) floatation coats
10.	*Ring Buoys:*	(2) 24" with lights; Lifesling on aft railing
11.	*Epirb:*	N/A
12.	*Flares:*	Yes (see comments below)
13.	*Life Raft:*	Zodiac 6-man expires 1/2021. Hydrostatic release expires 1/2021
14.	*Horn:*	Yes
15.	*Bell:*	N/A (vessel less than 12 meters)
16.	*Navigation Lights:*	Side, stern, red and white 360°
17.	*Navigation Lights Tested:*	Yes
18.	*General Alarm:*	N/A
19.	*Oil Discharge Placard:*	Yes
20.	*Garbage Discharge Placard:*	Yes
21.	*Carbon Monoxide Alarm:*	None (see Surveyor's Notes)
22.	*First Aid Kit:*	Yes

Fire and Safety Comments:

1. Flares- (4) parachute expire 3/2021; (8) hand red expire 1/2021; (6) hand orange expire 1/2021
2. Vessel also carries defibrillator and medical Ox

NAVIGATION/ELECTRONIC EQUIPMENT

Radar:	Furuno FR-8065
Depth Sounder:	Hummingbird digital
VHF Radios:	(2) Standard Horizon Eclipse; (1) Standard Horizon handheld
GPS:	Furuno GP-1850DF with c-map chart chip dated 2/23/2003
Plotter:	See GPS
Compass:	Ritchie 3"
Hailer:	Raytheon Raymarine 430
AIS:	Furuno Class B AIS transponder
Entertainment:	Sony Marine CDX-M10 AM/FM CD Stereo
Other:	• Electroguard Inc. electrolysis protection level meter • Levono Thinkpad laptop computer T420 with Coastal Explorer charting software updated • Humphree trim tab control

Navigation/Electronics Comments:

1. Compass deviation card dated 9/27/2011 posted.

GENERAL CONDITION

This vessel underwent extensive rebuilding in 2014 and the hull and machinery appears to be in excellent condition.

FINDINGS AND RECOMMENDATIONS

HIGH PRIORITY (Recommendations to do immediately due to safety issues):

No recommendations

MODERATE PRIORITY (Recommendations which should be accomplished as soon as possible):

1. At the time of survey (9/03/2020) the vessel's fixed extinguisher in the engine room, and portable fire extinguishers, were still in date but set to expire on 9/27/2020. RECOMMEND ensure that both the fixed and portable extinguishers were serviced prior to the expiration dates.

LOW PRIORITY (Recommendations considered as best practices or betterment):

1. The cabin bilge pump discharge is installed about 18" above the static waterline. However the vessel operator reports that in rough weather water flows down

through the discharge and into the bilge. RECOMMEND install a check valve to prevent inadvertent back flow into the bilge.

2. The bilge high water alarm is connected to a visual light and ringer. Consider connecting the alarm to a cellular alert system that can text the vessel crew in the event of a flooding incident.

APPRAISAL

Opinion of Vessel's Fair Market Value:	$150,000
Opinion of Vessel's Replacement Cost New:	$475,000

Notes for Appraisal:

A. An "as is, where is", cash equivalency, 100% ownership interest assumption was made in determining the opinion of Fair Market Value.

B. The estimated Fair Market Value is the definition from the American Society of Appraisers (ASA) Machinery and Technical Specialties (MTS) Committee: "*Fair Market Value* is an opinion expressed in terms of money, at which the property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or to sell and both having reasonable knowledge of relevant facts, as of a specific date."

C. The estimated Replacement Cost New is the definition from the ASA MTS Committee website: **"***Replacement Cost New* is the current cost of a similar new property having the nearest equivalent utility as the property being appraised, as of a specific date."

D. Sales Comparison (Market) Approach, Cost Comparison Approach, and Income Approach were considered. No information regarding the vessel's income was provided so this approach could not be used. This vessel is a specialized type of vessel with few, if any, comparable vessels available for developing valuation based upon the market approach. The cost approach was used to determine the opinion of value.

E. I recently obtained an emailed estimate from the vessel builder to replace the bare vessel (hull, deckhouse and propulsion) with a new identical unit for $350,000. I added $125,000 for internal furnishings and electronics to arrive at the estimated replacement cost new of $475,000.

F. In my opinion the work accomplished in 2014 added a minimum of 10 years of service life to the vessel, having the effect of changing the effective age from 27 years to 17 years in 2014. The current effective age of the vessel would be 23[1] years.

E. For the Cost Approach calculations I assumed a replacement cost of $475,000, a current Effective Age of 23, a Normal Useful Life of 30 years, and a residual salvage value of $50,000.

F. The calculation of Fair Market Value by the Cost Approach, with only Physical Obsolescence (depreciation) considered is as follows:

Current Replacement Cost New	$475,000
Less Terminal Value	- $50,000
	$425,000
Less depreciation *(425,000 x .766)*	-$325,550
	$99,450
Plus Terminal Value	+ $50,000
	$149,450

G. Deducting the residual salvage value, applying straight-line depreciation for 23 years, then adding back the salvage value resulted in a Fair Market Value of $149,450, rounded up to $150,000.

G. I made the following assumptions regarding the valuation:
- Information provided by others that was considered in the valuation is from sources believed to be reliable and no further responsibility is assumed for its accuracy.

G. The following Extraordinary Assumptions were made regarding the valuation:
- The vessel's underwater body condition supports the fair market value.

H. No Hypothetical Conditions were assumed regarding the valuation.

I. The following Limiting Conditions apply to the report:

- All information presented in this report is true and accurate to the best of the surveyor / appraiser's knowledge and belief.

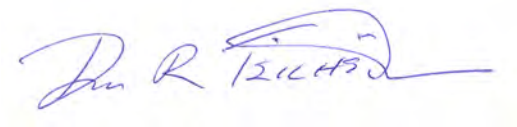
[1] An addition error was found in the effective age computation in our last report dated 12/28/2028. In that report the effective age was stated as 18 years in 2014. It should have been 17 years (2014-1987=27, 27-10=17)

- The surveyor / appraiser renders no opinion as to legal title. Prevailing liens or other encumbrances were disregarded, and the property was appraised as if free and clear, unless otherwise specifically stated.
- This study was made for the purpose stated and cannot be relied on for any other purpose. This report is for your internal use only and, unless otherwise stated, should not be disseminated to the public or third parties in any part of form.
- All estimates of value are presented in this report and the surveyor / appraiser's considered opinion. The opinion of value is only valid for the stated effective valuation date (effective date is located adjacent to the signature line on the last page of the report), and for the stated purpose (located on the first page, second paragraph).
- We reserve the right to make such adjustments to the valuation herein reported as may be required by consideration of additional or more reliable information that may become available.
- Testimony or attendance in court by reason of this appraisal shall not be required unless arrangements for such services have previously been made.
- Neither all, nor any part, of this report is to be conveyed to the public though advertising, public relations, news, sales, or other media without written consent and approval of the undersigned.
- This appraisal was made in accordance with the code of ethics set forth by the American Society of Appraisers and the Uniform Standards of Professional Appraisal Practice.
- This appraisal did not consider the possibility of the existence of hazardous materials or toxic wastes. Should there be concerns about the existence of such substances on the property, we consider it imperative that you retain the services of a qualified independent engineer or contractor to determine the existence and extent of any hazardous materials, as well as the costs associated with any required or desirable treatment or removal.
- This examination has been conducted without making removals, or opening up to expose areas or components ordinarily concealed, or testing for tightness, or testing and/or running machinery or equipment, and does not, therefore, address any damages and/or deficiencies which might have been revealed if such procedures had been executed.
- No incline experiment, stability studies or stability analysis was performed in conjunction with this condition and valuation survey. This report and the attending surveyor and this office express no opinion relative to the stability of this vessel. **FURTHER, THIS LIMITED REPORT IS ISSUED IN ACCORDANCE WITH THE TERMS AND CONDITIONS ATTACHED AS ENCLOSURE #2.** Acceptance of this report or its use for any purpose shall serve as acknowledgment of and agreement with these terms and conditions.

SURVEYOR'S NOTES

A. Vessel's call sign is WDA 9145.
B. Carbon Monoxide (CO) is an odorless gas produced during the burning of hydrocarbons. Vessel equipped with gasoline engines and enclosed accommodation spaces are required by American Boat and Yacht Counsel (ABYC) A-24.7.1 to be equipped with a CO detection system. Vessels equipped with solid fuel or LPG appliances, or diesel engines, are recommended to be equipped with a detection system.
C. With the exception of the deficiencies noted above, this vessel appeared to be in satisfactory condition for operation as a pilot vessel in inland service.

This report is issued without prejudice to any parties who may be concerned.



September 3, 2020
Effective Date

Dana R. Teicheira
NAMS Certified Marine Surveyor
ASA Accredited Senior Appraiser

Enclosures
1. Appraisal Certification
2. Survey Terms and Conditions