# Frank Abbey Marine Surveyor & Consultant Inc.

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Marine Survey Prepared for: xxxxxx xxxxxx

Vessel: 2005 Sea Ray 390 Sundancer

Date: *xxxx xx, 201x* 

# -- <u>SURVEY TABLE OF CONTENTS</u> --

# Page Subject (when applicable)

- (3) Accommodations
- (5) Air Conditioning
- (9) Anchor and Windlass
- (7) Bilge Pumps
- (1) Client, General Survey Information, Vessel Dimensions, Hull & Assigned Numbers
- (1) Construction, type of.
- (2) Decks
- (3) Deck Hardware
- (11) Deficiency Notes (\*)
- (7) Domestic Water System
- (6) Electric Systems; D.C. & A.C.
- (4) Engines and Ventilation & Exhaust Systems
- (7) Fire Fighting Equipment
- (5) Fuel System
- (8) Galley Equipment
- (5) Gen-Set
- (2) Hull and Bottom
- (8) Marine Sanitation Device (MSD.)
- (9) Navigation Electronic Equipment
- (9) Other System / Equipment
- (--) Photographs 25 attached
- (i & 11) Preface, Scope & Conditions of Survey
- (9) Safety Equipment
- (3a) Sails & Sail Equipment
- (8) Steering
- (10) Summary Remarks
- (9a) Test-Run Notes
- (4) Underwater Gear
- (1) Value

# **Frank Abbey Marine Surveyor & Consultant Inc.** 516-236-1911 : PO Box 729; Massapequa Park, N. Y. 11762 : fta102@yahoo.com

# **PREFACE TO SURVEY**

**A)** Survey is conducted in accordance with the Standards & Recommendations established, by the American Boat & Yacht Council Inc., (ABYC) and the Code of Federal Regulations for Recreational Boats, (CFR).

**B)** The Survey is a visual inspection, utilizing non-destructive inspection methodologies, i.e., mallet sounding, moisture meter and pyrometer. No determination /opinion of the vessel's characteristics or inherent structural integrity will be made or expressed. All observations are strictly in the nature of opinion. The facts as discovered and presented in this report are in no way deemed a guarantee & / or warranty, for the vessel, either expressed on implied.

**C)** The Scope of this Survey provides only for inspection to those areas, of the hull, topsides and decks that are normally viewable /accessible, without removing structural components i.e., bulkheads, partitions, liners, joinery, frp. pan etc. The Surveyor does not utilize devices (other than a moisture meter & infrared heat gauge) that substitute for the direct viewing of any area. The report will not speculate regarding the condition of areas not normally viewable or accessible. The Surveyor will not be responsible for: The lack of discovery of illegal / unsafe conditions, alterations or other conditions that by design / purpose are, in a manner so as to conceal their existence for normal viewing, (i.e. heavy buildup of bottom paint),including, but not limited to cosmetic attempts to conceal blemishes / decay / dry rot /damage / imperfections etc..

**D)** The scope of the machinery / engine sections of this survey are limited to comments regarding the operating characteristics exhibited, at time of the survey, for the machinery (if any) that is commissioned & operated, at time of survey. Readings from the vessel's gauges if any) will be recorded in the survey: Those readings are not verification of the accuracy of the gauges or sending units. Deviations, if apparent from normal performance standards, will be noted. No reference of information should be construed to indicate evaluation of the internal condition of any machinery / engines.

**E)** The Surveyor will not disassemble any parts / items of any engine or other machinery. The Survey will not speculate regarding the condition of internal parts / components of engines or other machinery.

**F)** The scope of the Survey section for Navigation & Electronic Equipment is limited to those items installed, at the time of survey; in that they powered on and the screen displays were optional. No affirmation regarding the equipment's accuracy / performance is expressed or implied.

**G)** The individual / entity requesting this survey is responsible for all fees and arrangements necessary: for the vessel to be prepared, hauled out (on land), commissioned and operated at the test-run.

**H)** The vessel's estimated "current fair market value" (i.e. the monetary or its equivalent, that a willing seller will accept, with neither party being under any undue pressure to act in the matter, for the vessel, from a willing buyer), is based on one or more of the following: "BUC Research", various other publications or electronic sites listing boats for sale.

I) Third parties who wish to obtain a copy of the survey report should contact the person for whom the survey was performed. F Abbey Marine Surveyor Inc. will issue copies only on instruction from & with the permission of the original client. Fees for additional copies and transmittal expenses will be charged to the original client.

END OF TEXT

# Frank Abbey Marine Surveyor & Consultant Inc.Frank T. Abbey Certified Marine Surveyor ACMS# 0181Member: ACMS: Association of Certified Marine Surveyors & A.B.Y.C. American Boat & Yacht Council516-236-1911PO Box 729; Massapequa Park, N. Y. 11762-0729fta102@yahoo.com

VESSEL: 2005 Sea Ray 390 DA

Date: xxxxx xx, 201x

Requested By: xxxxx xxxxxx

Address: xx xxxxx xx N. Y.

Survey; Date & Situation / Location / : x-29-201x; vessel blocked on-shore; client not attending;

bright sun, ambient temp. 41-46f & x-xx-201x; vessel afloat and at a test-run & systems commissioned; client attending / xxxxxxu Marina - xxxxxx N.Y. (selling broker).

Reason for Survey (as requested by client): Condition & value; for for pre-purchase.

**Description:** <u>Hull ID#:</u> **SERFxxxxx05** [390DA - xxx] (photograph redacted)

Year & Builder: 2005 :: Sea Ray Boats Model: 390 Sundancer

Documentation #: xxxxxxx (photograph redacted)

Type of Vessel: express cruiser w/ twin V-drive gasoline engines. Hull Color: white

Value: \$xxx,000 vessel purchase price; a discount to "sold-boats.com and yacht world.com listings; see p 10a.

**<u>Replacement Value:</u>** \$476,000 (as reported by "BUC Research ValuPro")

Dimensions (from published specifications): Weight: 19,300 lbs. L.O.A.: 41'- 00" Length On Deck: 39'- 00" Beam: 13'- 02" Draft: 3'- 4"

**Structural:** <u>Type of construction:</u> Molded fiber reinforced plastic (frp.) and frp. encased wood for stringers /- other structural reinforcements; gel coat finish. Glasswork, as sighted, appeared neat and well finished.

Decking: frp. over wood core material, with gel coat and non-skid finish.

Hull to Deck Assembly: as sighted, overlapping;

Bulkheads: frp. over plywood/other material.

Joinery: teak, corrian & vinyl.

*Survey tools which may utilized: "Tramex/Skipper" and "GRP" moisture meters; infra-red pyrometer.* (*Legend: \* = Item needs attention, see page 11 // Na. = Not Applicable // Ns. = Not Sighted*)

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Page 1 of 11

**Hull & Bottom:** Deep-V hull; solid frp. construction; bottom has smooth coating (over previous layers) of black anti-fouling paint. Gel coat finish (above waterline) appeared sound and in as-new condition. Hull was sighted & sounded (via percussion taps, at random, on hull sides & bottom) and appeared fair, true and sound; no readily -detectable defects (evidence of laminate separation / voids / - blisters / damage / repairs except as; port hullside (above waterline) slight gel coat / surface void evident; sized 4" x 4" (located 1" above silver boot stripe; 24" aft of above water line thruhull and 26" below the most fwd. portlight. (no cracks / damage evident; possibly occurred at original lamination process. Dimensions are approximate) evident. [stbd. side black (tape) boot-stripe shows "orange-peal / alligator" roughness (apx. 70% of its length); no frp. / gel coat finish damage / issues evident on adjacent surfaces. *4-23-2016, new tape on, applied by survey client.*] Moisture meter readings (above line of anti-fouling paint) @ 0 - < 10 (in the dry range). Stringers, tabbing and frames, as sighted & accessed, appeared sound. Hull and frames - (as sighted / accessed) during test-run had no flexing / movement evident.

(Note: Built-in cabin structure / cockpit frp. pan / joinery restrict access, to the hull's internal structures & surface.)

**Bow Thruster:** *Vetus* 24v powered, under the fwd. cabin's sole; thruster tube (frp.) appeared (as sighted / accessed) sound and neatly faired to the hull; 3- blade composite impeller appeared sound, no damage evident; served by 2- G31 batteries (connected in series; engine space fwd. to port), 2- in-line high amp fuse and 1- in-line high amp breaker (each "+" terminal covered; to port & above the batteries). System (as sighted / accessed) appeared neatly rigged and (except as \*Note# 3) in satisfactory condition. Thruster (at test-run docking) powered on, and appeared operational. Thruster controls; power on-off @ helm console switch panel and "joy-stick" w/ second "on - off" switch on helm console.

**Decks:** Gel coat finish (clean & bright) appeared in as-new condition; no stress cracks / damage evident. Decks (as accessed & percussion sounded) appeared sound & tight, no delamination evident. Moisture meter readings @ 0 - 05 (in the dry range).

*Moisture readings via Tramex Skipper Meter; set on Range# 1, scale reads 0 - 100, 0 - 25 is the "dry-range". Metered surfaces appeared free of surface condensation & salt residue.*]

# **Deck Hardware:**

stainless steel (ss.) bow & grab rails, ladder (@ platform), 9- cleats, anchor roller; windlass; windshield w/ 12v powered opening center panel vent (appeared operational), on-center; cockpit deck / engine hatch w/ 2- 12v powered lift rams (operational). Hardware, showed clean & bright / in as new cosmetic condition and as accessed appeared sound (no damage / deterioration evident) and tight to the deck structures.

# Accommodations & Ventilation and Cockpit:

Settee / Berth space aft; Galley to port; Settee / Dinette stbd.; Head fwd. to port; Shower Room stbd.; Master Cabin fwd.. Joinery, upholstery, furnishings & trim (vinyl / leather & cloth) and equipment appeared clean and in as-new condition. Bins, cabinets and lockers (as accessed) appeared clean & dry.

1- opening hatch (with built in screen and sun shade); 1- fixed skylight (with sun shade of teak veneer over composite veneer; \*fwd. edge shows cracked / dry -appeared from UV exposure); 4ports; 12v vents (galley & head; each powered on; \*galley vent motor is noisy). Cabin appeared dry (no water leaks / stains evident) at time of survey.

Cockpit upholstery (vinyl) appeared in as-new condition. Frp. console structure, to. port, w/ counter, sink, refrigerator and cabinet. Frp. top (over cockpit fwd. area) built in with radar arch.

<b><u>Underwater Gear:</u></b> <u>Prop Shafts:</u> 1 <sup>1</sup> / <sub>2</sub> "ss.		Propellers: bronze / nibral, 4- blade. *Note# 1.			
Struts: bronze; 1- "P" type per shaft.		Shaft Bearing: cutlass. *Note# 2.			
Thruhulls: bronze & ss.	Seacocks: 5- bronze ballvalves.				
Rudders: 2- bronze	Trim Tabs: aluminum; appeared operational at the test-run.				
Evidence of Corrosion: none evident, at time of survey.					

<u>Remarks:</u> (Note: materials, ss., bronze etc. are described as they appeared, no testing as to their content/quality.) Raw water intakes fitted w/ bronze external (South-Bay) & in-line strainers; hose connections, as sighted, showed double clamped. Prop shafts hand-turned free & easy. Seacocks appeared operational. Fitted with a "bonding" system. Gear (as accessed) appeared sound (no damage / deterioration evident except as noted on 3-29-16 survey day) and tight to the hull.

Engines:2-V drive gasoline V8Mfg: MerCruiserHP: 425 eachNo. of Cyl.:8 :: 496 cid.Model:8.1S HOSerial #s:p) OWxxxxxx:: s) OWxxxxxx

Max RPM: 4400 - 4800 Engine Hours: p) 466 :: s) 463 (via SmartCraft display)

Engine Bearers: aluminum cap brackets bolted on to frp. stringers.

Engine Mounts: cushion type steel pads; bolted to the bearers.

Stuffing Box: PSS by PYI ss. dripless type; appeared satisfactory no drip evident. (upgrade to original units)

Transmission: ZF 631V-2.5; V-drives; 2.50 : 1.00 (ratio).

Engine Controls: cable; Morse, 4- single function levers; appeared operational.

<u>Type of Cooling</u>: fresh water; raw water; intake via bronze seacocks & strainers and hd. hose; fwd. & outboard of each engine; appeared satisfactory.

<u>Remarks:</u> Engine space and engines have clean external surfaces; no oil-soot-rust evident; each engine lube oil showed fresh / no unusual colorations evident; monitoring gauges (analog & *SmartCraft VesselView LCD* displays), all appeared operational; neutral "safe" switches were functional. Transmission; each lube oil showed clear / right no unusual colorations evident; each shifted smooth & quiet. Test run notes pg. 9a.

Exhaust System: wet exhaust via; cast iron manifolds,. ss. risers, frp pipe and J2006 hose.

Muffler: frp. aqua lift can (one per engine).

<u>Remarks</u>: Below & above-waterline outlets; systems (as sighted / accessed) appeared satisfactory (noexternal leaks, rust stains / residue evident); connections were double clamped. Risers (at test-run) ran within normal temperature ranges (pg 9a).

Engine Space Ventilation: natural and DC powered blowers & flex vent hose. Blowers powered on.

<u>Air Conditioning:</u> 120v <u>Mfg.:</u> Cruse Air <u># of Units:</u> - 2 - <u>Reverse Cycle:</u> yes

Location: one under fwd. berth (12,000 BTU); one in compartment (not sighted) under salon steps Raw Water Intake: bronze ballvalve & strainer and 120v; engine space fwd. on-center.

<u>Remarks:</u> Appeared (as sighted / accessed) satisfactory. Systems appeared operational; each produced - air heated @ 84f - 93ff, at the vents and then chilled @ 48f - 52f, at the vents; ambient temp 63f - 75f. [Operated (via shore & gen-set power) for apx. 150 minutes.]

**<u>Gen-Set:</u>** <u>Location / Access:</u> outboard of stbd. engine (w/ insulated box enclosure) / adequate.

 Make:
 Kohler
 Model:
 73-E
 Serial #:
 xxxxxx

 Fuel:
 gasoline
 Kw.:
 7.3 @ 60hz
 Hours:
 0617.5 (meter)

 Raw Water Intake:
 bronze ballvalve & in-line strainer and hd. hose engine space aft on center.

 Exhaust system:
 frp. aqualift muffler & J2006 hose w/double clamps; outlet located aft on stbd. hullside.

<u>Remarks:</u> Fresh water cooled 3,600rpm engine; showed clean external surfaces; controls & bilge blower switch at salon DC panel. Engine lube oil and f.w. / anti-freeze fluids, appeared fresh / no unusual - colorations evident. Engine started quick & easy and ran well under all loads (no fluid leaks / distress - evident); operated for apx. 40 minutes, powering the vessel's 120v circuits and equipment; output @ - 120v (full-load) and polarity correct at the outlets.

**Fuel System: Fuel System:** # of Tanks: 2; one outboard & fwd. of each engine.

 Fuel:
 gasoline
 Fill Label:
 Gas
 Tank Material:
 .125" 5052 aluminum

 Capacity:
 225 gal. total.
 Status:
 p) ½ full ::
 s) ½ full (panel gauges)
 Bonded:
 wire sighted.

 Secured:
 brackets (as sighted).

<u>Fill Lines:</u> A2 hose <u>Feed Lines:</u> A1 hose <u>Vent Lines:</u> A1 hose

Filters: metal cans; in-line off engine & on engine.

<u>Remarks:</u> (No aerostatic tests performed.) System, as sighted & accessed, appeared in satisfactory condition with alcohol resistant lines; no leaks or vapors detected at this time. (Entire tank structures and run of lines not directly sighted, due to their installation in the hull.) On engine sea water cooled fuel "cooler" units (updated units w/ "blue" plastic drain fitting) showed clean (no water leaks, salt / rust stains evident) external surfaces.

Electric System D.C.: 12v engines & ship systems; 24V bow thruster system.

Panel Locations (12v service): salon aft. stbd. cabinet, helm console & engine space, fwd. on center.

# of Batteries: 6- G31 (4- serve the 12v systems for the propulsion & gen-set engine and ship's systems and

2 (most fwd. batteries)- connected in series serve 24v bow thruster system); outboard of the port engine.

Secured: tray & brackets (each battery) <u>Covered:</u> yes

<u>OverCurrent Protection</u>: breakers, at each panel; bow thruster in-line breaker & fuses outboard & above the batteries; windlass in-line breaker fwd. of stbd. engine.

<u>Battery Switches:</u> (6) solenoid type (on-off function) 3- at cabin DC panel and 3- at the engine space panel; one at each panel labeled "port" - "gen" - "stbd"; each appeared operational.

<u>Remarks:</u> Volt & Amp meters (port & stbd. battery select switch), 11- branch breakers and 3- battery - switches, at salon panel. 18- branch breakers & 3- battery switches at engine space panel. System (as - sighted / accessed) appeared neatly rigged, operational and (except as \*note# 3) in satisfactory condition. Gen-set engine & bilge blower controls at the salon panel. (Bow-thruster system notes; page 2)

# Electrical System A.C.: 120v 30amp

Panel Location: salon aft. stbd. cabinet.

OverCurrent Protection: breakers & GFCI outlet (1- in Head (port outlets; unit for stbd. outlets not sighted).

Shore Power Input: 2- 120v 30 amp w/ breakers in transom locker.

<u>Battery Charger:</u> *Intel PD 20-40* (fwd. of port engine); *ProTech* (outboard & above the batteries); each - showed (via on unit LED status / output lights & analog meter) as powered on and operational; DC panel volt meter indicated charger's 12v output.

<u>Remarks</u>: Line 1 & Line; each with volt & amp meters, 1-main breaker w/ source select lock-out slides and reverse polarity indicators; 7- branch breakers @ Line 1; 6- branch breakers @ Line 2. System (as - sighted / accessed) appeared operational (powered via shore and gen-set power sources) neatly rigged and in satisfactory condition.

#### Fire Extinguishers: Class :: Size :: Location

 2- Kidde	BC	Ι	(*in a box) stbd. cabinet in cabin's aft settee / berth space.
 1- Kidde	BC	Ι	at cockpit helm seat console.

Fixed Fire Extinguisher: SeaFire G250A, engine space fwd; gauge reads charged.

<u>Remarks:</u> \*One of the two B-I units (in aft cabin's cabinet) needs to be removed from its packaging and mounted on a bracket in a visible / accessible location, for the vessel's inventory to meet the USCG minimum requirements, for this size (>39.4') vessel.

<b>Bilge Pumps:</b>	Mfg. /Type	:: Size ::	Secured ::	Location
2-	Rule sub.	2,000 each	yes	engine space aft on center
	<i>Rule</i> sub.	2.000	ves	engine space fwd. on center
	Rule sub.	1,000	yes	aft under the salon sole

Shower Sump: boxed Rule 800; under cabin sole. (also serves air conditioner pans condensation drain).

<u>Remarks:</u> Bilge pumps (via float & panel switches) powered on; shower sump (via float switch) powered on. No unusual accumulation of bilge waters evident; pumps did not cycle on during time of survey. (salon bilge needs to be cleaned of rust stains(air conditioner condensation) & slight water accumulation (result of recent shower sump overflow caused by not operational (now corrected) float switch.0

## **Domestic Water System:**

<u># of Tanks:</u> - 1 - <u>Tank Material:</u> unk. could not view (reported to be plastic).

Location: under aft berth / salon sole. <u>Secured:</u> could not view.

<u>Capacity:</u> 70 gal. <u>Status:</u> near full (tank gauge @ salon DC panel)

Pump: ShurFlo 12v w/ filter; fwd. of port engine. Sinks: 3; galley, head & cockpit.

Water Heater: Atwood 6 gal., 120v (w/ 150 psi relief valve); to port under aft compartment's settee.

<u>Remarks:</u> System (as sighted / accessed) appeared satisfactory; pump powered on; temperate & heated (94f -109f) @ fixtures; temperate water @ MSD; plastic (red & blue) distribution lines w/ valve manifold (fwd. of water heater). Tank structure & entire run of lines could not be sighted, due to installation in the hull.

# Marine Sanitation Device (MSD.):

<u>Type:</u> fresh water, *Vacu-Flush* 

Pumps: 12v flush & 12v macerator; outboard of port engine. <u>"Y" Valve:</u> ---

Holding Tank: 1- plastic; 42 gal.; <1/4 full (tank gauge @ salon DC panel) Secured: brackets

Location: outboard of port engine

Thruhull Valve: macerator outlet, aft of port engine; bronze ballvalve w/ pump inter-loc switch.

<u>Remarks:</u> Type III MSD system with holding tank and deck pump out. System (as sighted / accessed) - appeared satisfactory; seacock (moderately stiff) & inter-loc pump switch appeared operational; pumps - (flush & macerator) powered on; flush function introduced & evacuated water @ the MSD; no off - on - off cycling evident during time of survey.

# **Galley Equipment:**

<u>Stove: Kenyon;</u> 2-burner w/ fiddles. <u>Fuel:</u> 120v <u>Secured:</u> flush on the counter-top. <u>Joinery Protected:</u> yes <u>Ventilation:</u> 12v blower (motor noise) <u>Refrigeration:</u> *CoolMatic N4213* (refrigerator) 12v & \*120v powered; 12v appeared operational @ 38.9f; and separate *CoolMatic N4213* (freezer) 12v & 120v powered; appeared operational @04.3f. <u>Other Equipment:</u> 120v *Inverter* (ss. case) microwave; 120v coffee maker.

<u>Remarks</u>: All appeared clean and in near-new condition. Appliances 120v & 12v functions (except as - \*Note# 4) powered on; breakers for the refrigerator & freezer @ salon DC & AC panels.

Steering: Type: Sea Star, hydraulic. No. of Stations: - 1 -

<u>Remarks:</u> System (as sighted / accessed) appeared satisfactory; bronze - rudder arms, shaft logs & supports, ss. shafts and steel tie-bar. System (at test-run) appeared operational via wheel & auto-pilot; turned smoothly from stop-to-stop.

Safety Equipment: \*Personal & Type IV Flotation Devices: \*none onboard at time of survey.

\*<u>Navigation Lights:</u> 12v \*Note# 5. <u>Sound Producing Device:</u> bell & 12v horn

Flares: \*none onboard at time of survey. First Aid Kit: ---

<u>CO Detector:</u> 3- units (master cabin; salon and aft settee / berth area).

<u>Remarks:</u> \*Install flotation devices and flare / visual distress signal kit as per Federal Requirements. \**Note:* Self propelled vessels over 39'- 4" (12 meters) are required to carry a copy of International - Inland Navigation Rules; as per Federal Regulation, 33 CFR 88.05..

# Anchor: Type :: Rode

plow <sup>1</sup>/<sub>4</sub>" all chain (bitter end showed as secured via shackle to a strong pint in rode locker) *Windlass:* Lofrans 1000 ss. w/ horizontal rope - chain capstan; breaker fwd. of stbd. engine.

<u>Remarks:</u> ss. swivel at rode-to anchor connection. Windlass (via deck & helm console switches) poweredon; no load applied.

 Navigation Electronic Equipment:
 Compass:
 Ritchie
 VHF Radio:
 Raytheon

<u>GPS - Chart Plotter - Radar - Depth / Fishfinder:</u> Ray C120 (color LCD display)

Depth sounder & Speed/Knotmeter: Smart Craft (LCD display)

<u>Auto – Pilot:</u> Ray ST701 (compas sending unit fwd. under salon sole aft hatch).

Other Equipment: Sturdy (mechanical) engine synchronizer; control unit fwd. of stbd. engine.

<u>Remarks:</u> Units powered on, displays appeared operational showed data / data up-dates & functions; auto-pilot was powered-on and appeared to hold and steer a course (port & stbd. "dodge functions engaged); engine synchronizer powered on - engaged and controlled both engines..

<u>Other Systems / Equipment:</u> cockpit carpets (in good condition); cloth runners over cabin carpet (in good condition); *Norcold DE0051* 12v & 120V power (powered on; freezer @ 015.8f), in cockpit; DC spotlight (powered on); *Samsung* LCD TV (aft berth); *Zenith* LCD TV (DC powered drop down @ galley - headliner); *Zenith* LCD TV (master cabin); *KVH M3* satellite TV system (not tested); 120v DVD player (galley cabinet); DC audio system w/- CD changer (powered on); cloth & isinglass curtains / cockpit enclosure (appeared in very good condition); 120v central vacuum cleaner (not tested; hose/attachments not onboard at survey); 12v remote control spotlight (operational). [Note: audio video (multiple remote controls) gear powered on; functions / source playing etc. beyond the scope of survey / not tested.]

Port Engine				Starboard Engine			
	RPM	Oil psi.	Temp.f	::	RPM	Oil psi.	Temp.f
Idle	650	>40	160 / 165		650	>40	160 / 165
Mid	3600	55	165		3600	55	165
<b>W.O.T.</b>	4800	55	165 / 170		4800	55	165

**Test Run Data:** (Readings taken from the vessel's analog gauges)

Hull Speed, from vessel's GPS: 20.7kts @ 3600rpm :: 30.6 @ 4800 rpm / W.O.T.

Drag Test from 3,000 rpm.: port engine attained 4,100 rpm. // stbd. engine attained 4,100 rpm.

= = =

**Test-Run Remarks:** Duration, apx. 75 minutes; 4 (client, selling broker, marina mechanic & this surveyor) on board, selling broker at the helm; conditions light winds; calm seas (xxxxxx - xxxxxxx Bay). The - engines; started quick & easy when cold or hot and ran well; no vibrations, hesitation, "blow by" smoke, distress or fluid leaks (post replacing stbd. engine's raw water pump) evident; smoothly & readily attained and held at all speeds up to the 4,800 attained (their rated) maximum rpm.

Volts: port) 13v : stbd) 14v. @ idle :: port & stbd. 14v @ speeds > 1,000 rpm.

Gauge (analog & LCD) appeared operational; all readings appeared within normal ranges.

Steering & Trim Tabs appeared operational.

Transmissions shifted smooth & quiet.

Controls and neutral safety switches appeared operational.

Engines appeared tight to their mounts.

Dripless propeller shaft stuffing boxes - no drip evident.

Auto-pilot and mechanical engine synchronizer engaged and appeared operational.

= = =

Temperature readings via non-contact pyrometer; degrees f.

Item (a) 3400 RPM ::	<b>Port Engine</b> ::	Stbd. Engine
inboard riser	121f- 129f	103f - 110f
outboard riser	107f - 112f	124f - 130f
thermostat housing	147f - 156f	150f - 159f

<u>Remarks:</u> readings appeared within normal ranges.

**NOTE:** We strongly urge that engines be surveyed by a qualified Engine Surveyor; to determine the condition of the engine, gears, pumps, heat exchangers, risers, manifolds, etc..

Test run notes should not be considered as equivalent to an engine survey.

Survey Conducted in Accordance with A.B.Y.C. Standards and the Code of Federal Regulations for Recreational Boats.

#### **SUMMARY REMARKS:**

This survey was conducted on xxxxx xx & xxxx xx, 201x at xxxxxxx Marina (selling broker) - xxxxxxx N.Y.; with the blocked on-shore, afloat (all systems commissioned) and at a test-run. The vessel a 2005 SEA RAY 390 Sundancer is powered by twin fresh-water cooled V-Drive MerCruiser - 8.1HO 425hp V8 engines and is equipped with; Smart Craft & analog engine monitoring gauges, Sturdy engine synchronizer, upgraded PYI - PSS dripless propeller shat stuffing boxes (replacing the original units of another manufacturer, Vetus 24v bow thruster, air-conditioning, 7.3kw gen-set, 12v & 24v battery charger systems, Vacu-flush MSD, anchor windlass (w/ all chain rode), color gps / plotter - radar - depth / fish finder, auto-pilot, multiple TVs and audio systems, cockpit enclosure and satellite TV system. The vessel generally appeared in near-new cosmetic condition. [Additionally; prior to the in water & test-run survey day (based on survey findings); the propellers were reconditioned and new propeller shaft (port & stbd.) cutlass bearings & a new stbd. propeller shaft were installed.]

The hull, bottom & decks were sighted & sounded and appeared true and sound (no defects / damage evident); moisture readings (above waterline hull) were in the dry range. Hull - topsides & deck gel coat finishes appeared in near-new cosmetic condition. The cabin and cockpit upholstery, trim and equipment appeared also in near-new condition. The vessels hardware systems & equipment (except as noted) appeared operational and in proper condition. At the test-run; each engine started quick & easy and appeared to run well, smoothly at all speeds and attained their rated 4,800 rpm maximum speed. The vessel's systems & equipment (except as noted) powered on (i.e. bow-thruster, air - conditioners produced heated & chilled air; gen-set started quick / easy & ran well under all loads powering the vessel's 120v system & equipment; DC pumps, battery chargers, water system, Vacu-Flush MSD, galley appliances, windlass) and their functions appeared operational. The three items noted (4-23-2016 survey day) to require attention appeared as service / repair issues that should prove not complex to correct. [Note: Survey client reported (x-xx-201x) that the noted items were in process of correction.]

continued on page 10

# continued from page 10a

The vessel as powered & equipped appeared, at time of survey (except as noted), sound and in near "BUC Bristol Condition". The \$xxx,000 survey noted value is the vessel's reported purchase price. That price is a discount too: I) "soldboats.com" data [fourteen same / simillar vessels (year 2005 390 -Sundancer w/ gasoline engines (hp not listed); sold between xxxxxxx 201x to xxxxx 201x with a -\$198,000 to \$135,000 selling price range] that produces a \$165,070 average selling price (see page 11a) and: II) the \$158,422 average listing price of the nine- 2005 390 Sundancers (2- listed with a bow thruster and 5noted as powered by the optional 425hp engines) with a \$199,500 - to - \$158,000 listed for sale price range. [The soldboat.com data and yachworld.com listing prices indicate that current market conditions / prices are stronger than as estimated / reported by "BUC Research ValuPro". This vessel's purchase price appears favorably compares (before considering the value added by the reconditioned propellers, new cutlass bearing and new stbd. propeller shaft) to recent sales and current market offering prices.

\* The following is the list of Deficiencies, (not listed in priority order), that require correction.

# 3-29-2016 Survey Day

1-- propellers (4- blade bronze / nibral): A) stbd. prop shows 2 blades one @  $\frac{1}{4}$ " & one @ >  $\frac{1}{8}$ " out of alignment. B) stbd. prop (when mallet tapped) produced a dull ring sound (vs. sharp-clear-sustained ring sound produced by the port prop). C) port prop shows one blade @  $\frac{1}{8}$ " out of alignment.

2-- stbd. propeller shaft cutlass bearing is worn / shows apx. 1/8" play; logical cause of wear / play would be vibration produced by stbd. propeller's out-of-alignment blades. [NOTE: i) stbd. propeller shaft must be checked for straightness and repaired / replaced as needed. ii) engine alignment must be checked and properly set, post each cutlass bearing installation. iii) to maintain drive-train balance port engine alignment needs to be checked & adjusted as needed. iv) recommend replace port cutlass bearing. [Note: Items 1 & 2 corrected (as reported by broker and as sighted 4-16-16 by survey client) as follows; propellers reconditioned, new stbd. propeller shaft and new (port & stbd.) cutlass bearings installed.] = = = =

# 4-23-2016 Survey Day

3-- bow thruster: A) install a boot / cover on thruster motor's "+" post. B) DC "+" current cable / wire connected at the thruster motor's "+" post re "black" colored insulation (color code for DC "-" / return service); the cable / wires need to be marked / color coded "red" to designate its DC service function as per *ABYC std. E- 11 TABLE XIII - WIRING COLOR CODE*.

4-- galley refrigerator (*Coolmatic* 120v & 12v powered) did not power on via 120vAC power (probable cause is failure of its inverter module; unit did power on via 12vDC power); service / repair as needed.

5-- red & green navigation running light fixtures did not power on.

## -End of Notes-

The vessel appeared, at time of survey, suitable for service, with limitations defined by design & construction, provided that routine & preventative maintenance is performed and the vessel is managed by competent master/crew with due regard to customary safety practices, good seamanship, weather conditions etc..

# Submitted in good faith and without prejudice,

FARAR T. ARARA (xxxxx xx, 201x; via e-mail)

#### FRANK T. ABBEY // Member A.C.M.S Certified Marine Surveyor; ACMS Certificate# 0181 Conditions of Report Acceptance

This survey was prepared; for the benefit of the named client; to determine the vessel's condition and approximate market value. The survey was conducted utilizing methods of non-destructive testing; and is based upon a visual inspection of the vessel; i.e. without removing panels, joinery etc., or disassembling / removing any machinery, to expose parts normally concealed. The survey is not rendered as a warranty, but and opinion of the above signed surveyor as to the condition of the vessel and equipment ONLY on the survey date. The Surveyor does not warrant or guarantee the performance, stability or characteristics of the vessel or its machinery and accordingly shall suffer no liability for errors or omissions or for not being able to properly evaluate parts. Our liability for any loss or damage arising out of this inspection and report, shall be limited to the fee paid for the services rendered herein. No reference in the report should be construed to indicate compliance of any equipment with manufacture's specifications. Recommendations (which are not meant to imply that All Deficiencies have been identified) are based upon standards set forth by the American Boat and Yacht Council and United States Coast Guard; in addition some comments may be based on the general experience of the Surveyor. The request and / or use of the survey shall constitute agreement of the Preface and above Conditions. *\*\*NOTE: Ultimate responsibility for, the vessel's Safe operation & maintenance and Safety of the crew & passengers, lies with the Owner and Master.\*\** 

F Abbey Marine Surveyor Inc.

Page 11 of 11

Items: 1 - 14 of 14 Page 1 of 1 SoldBoats.com Data

# 2005 Sea Ray 390 Sundancer (gasoline engines)

# **Boats Year Listed US\$ Sold US\$ Location Yacht-World Member**

\* 39' Sea Ray 390 ... 2005 219,000 (08/15) 198,000 (11/15) SC, USA Intracoastal...

\* 39' Sea Ray 390 ... 2005 179,990 (09/15) 158,000 (03/16) GA, USA Singleton Ma...

\* 39' Sea Ray 390 ... 2005 175,000 (04/15) 172,000 (01/16) FL, USA Tortuga Yach...

\* 39' Sea Ray 390 ... 2005 199,000 (10/14) 182,000 (01/15) CA, USA McKinna SD Y...

\* 39' Sea Ray 390 ... 2005 194,900 (09/14) 173,000 (04/15) MI, USA Platinum Yac...

\* 39' Sea Ray 390 ... 2005 189,995 (07/15) 178,000 (04/16) MI, USA McMachen Boa...

\* 39' Sea Ray 390 ... 2005 189,900 (01/15) 170,000 (08/15) FL, USA Galati Yacht...

\* 39' Sea Ray 390 ... 2005 182,900 (09/14) 170,000 (02/16) MI, USA Platinum Yac...

\* 39' Sea Ray 390 ... 2005 174,900 (08/14) 165,000 (04/16) CT, USA Jensen Yacht...

\* 39' Sea Ray 390 ... 2005 169,900 (11/14) 147,000 (07/15) FL, USA Galati Yacht...

\* 39' Sea Ray 390 ... 2005 159,000 (05/14) 145,000 (10/15) FL, USA Frank Gordon...

\* 39' Sea Ray Aft ... 2005 199,000 (04/15) 175,000 (07/15) CA, USA Richard Bola...

\* 39' Sea Ray Sund... 2005 139,000 (12/12) 139,000 (09/15) DE, USA Summit North...

\* 39' SeaRay 390DA 2005 167,900 (02/14) 135,000 (02/15) VA, USA Virginia Bea...

Items: 1 - 14

F Abbey Marine Surveyor Inc.

Hull ID# photo redacted

# USCG Doc.# photo redacted



















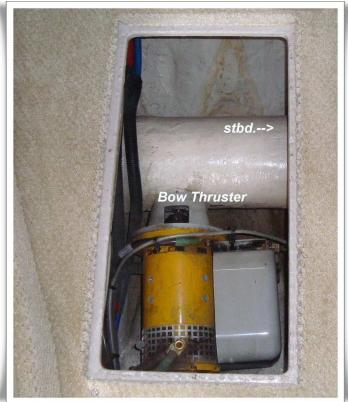








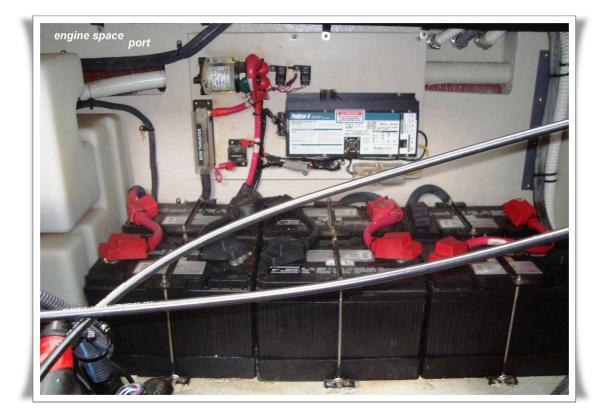














End of Survey Photographs and Report