Frank Abbey Marine Surveyor & Consultant Inc.

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Prepared for: *xxxx xxxxxxx*

Vessel: 1986 xxxxx 36

Date: *Xxxxx xx, 201x*

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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 and operated, at time of survey. Readings from the vessel's gauge (if any) will be recorded in the survey: those readings are not verification of the accuracy of the gauges and / or sending units. Deviations, if apparent from normal performance standards, will be noted. No reference of information should be construed as 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. Lube oil samples, if requested and taken, will be analyzed and reported on by a testing laboratory: Their report will be attached to the survey.

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.

I) Third parties who wish to obtain a copy of the survey report should contact the person(s) 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 Preface

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

 Date: Xxxxx xx, 201x

<u>Tel. #:</u> xxx-xxx-xxxx

<u>Survey Date / Location / Situation:</u> x-xx-2016 / xxxxxx Marina, N.Y. / vessel on-shore set on jack stands; winter tent type cover installed (cockpit- to deck fwd. of mast); client not attending; ambient temp. apx. 46f-51ff.

<u>Reason for Survey, *as requested by client:* survey review (non-testing) as per client's request of: "give us an idea of the boat's suitability for an ocean passage, and what areas need attention, repair, replacement improvement or refit".</u>

Description:Year/Builder:19xx ::xxxxxxx xxxxxxModel:xxHull ID #:xxxxxxxxx86State Reg. #:xxxxxxx xx





Survey Conducted in Accordance with A.B.Y.C. Standards and the Code of Federal Regulations for Recreational Boats. *(Legend: * = Deficient Item.)* Page 1 of 10

Remarks, Suggestions & notes of Deficient Items (noted by"*; not listed in priority order):

1-- Rudder (frp. free standing spade type; shaft / steering quadrent could not be accessed): A) port surface shows circular frp. repair / plug (sized apx. 1" dia.; located 19" up from rudder's base) and a fluid drip-stain running down to the rudder base. *Remarks: Cause / origin / purpose of observed frp. belmish could not be discerned. Possible that it was a reapair or from draining internal water accumulation.*)



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2-- each Headsail Halyard (green & white colored line) rigged with a snap shackle. Consider, for offshore / blue water service, using screw-pin shackles. = = = = =

3-- the green & white Headsail Halyards as observed, at time of survey, were stowed / set (assumed for this current 2015-2016 winter storage) were just past their mast exit chafing against each other and the (ss. wire) head-stay with the green halyard wrapped around the headstay: *Halyard run from each mast exit should be inspected for chafe / ware*. = = = = =

*4-- Life-Lines (vinyl covered ss. wire w/ ss. swaged ends & oben barrel ss. turnbuckles. A) age of life lines unknown; have inspected by a qualified rigger, replace as needed. *B) turnbuckles need to be seized (via cotter / ring pins) and covered to prevent chafe on the sail, running rigging. = = = = =

5-- *Anchor needs to be secured at the roller in a manner sufficient for offshore -storm conditions that may be encountered. (*It may be advisable, for offshore passage, to stow the anchor below deck.*)



*6-- Life-line Stanchion: stbd. fwd. stanchion (at the entry gate) aft brace's base is adrift / unfastened at the deck / toe-rail.



*7-- Toe-rail: A) stbd. sidedeck at the 2- entry gate stanchions. B) port sidedeck at stanchion, 2ed aft of the bow: shows upward movement (apx. 1/8") when an outboard directed load is applied to the stanchion.



8-- Foredeck (balsa cored frp.) area; toe-rail to tor-rail from stemhead fitting aft to the mooring cleats; showed elevated moisture readings with Tramex meter (a) 40 - 70; area as percussion sounded (at time of survey) no softness / delamination evident. [Recommend consult with a marine frp. repair technician for additional assessment of the condition and advice regarding remediation / repair.] [Readings via Tramex Skipper Plus meter; set on Range# 1, scale reads 0 - 100, 0 - 25 is the "dry-range". Metered surfaces appeared free of surface condensation & salt residue.] ====

*9-- anchor rode hawse-pipe (hinged ss. cap w/ open notch, on the foredeck) needs to be made watertight; to prevent storm driven seawater from flooding into the forepeak locker (and hence into the cabin space). ====

10-- Companionway drop Hatch-board is single piece of plexiglas: Recommend consider, for off-shore rig a 2 or 3 piece drop board; with the bottom board a height sufficient to deflect any sea water that flows onto the bridge deck yet easy to step over when transiting the companionway. = = = = =

11-- Companionway overhead Sliding Hatch & Drop-Board: Recommend consider, for off-shore use rig a means to secure each in place (that can be operated by persons inside & outside the cabin) so that the hatch and boards can be held closed regardless of sea conditions and in a "knock-down" event. _ _ _ _ _ _

12-- the 2 Harken swivel shackle blocks (on boom bails), for the mainsheet, as they rotate cause the mainsheet to become twisted. Review the set-up and determine if eliminating the block's swivel function would prevent the mainsheet from twisting on itself. = = = = =

13-- Recommend, install a Tri-color Navigation Light w/ emergency strobe, at the masthead. _ _ _ _ _

14-- install pad-eyes / strong attachment for on deck "jack-lines" and in the cockpit. (Recommend rig flat webbing straps designed to serve as "jack-lines" instead of traditional line.) = = = = =

*15-- battery installation (2-8D and 1-G27, under the navigation table on molded frp. pan shelves; the G-27 & one 8-D are on the upper shelf and one 8D on a *wood platform on the lower shelf; each shelf is open on the inboard / towards the keel line: A) each battery showed as secured by one nylon strap (appears to meet ABYC standards): Recommend, for offshore / blue water passage, rig brackets / blocks sufficient to secure each battery from vertical athwart & longitudinal movement regardless of sea conditions that may be encountered. B) the fwd. end of the G-27 battery is blocked apx. ¹/₂" from the plastic cover on a high amp DC fuse block: *Recommend relocate the fuse to preclude any chance of* the battery moving & damaging the fuse. *C) in-line "red" fuse holder (fwd. of G-27 battery) needs to be labeled. (ABYC std. 11.5.1.3.2 Each - overcurrent protection device that is part of the boat's electrical system shall have a means to identify its function and location in the system.) ====

(#15 continued on page 5)

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15-- D) DC branch circuit wires coiled / hanging under the nav station table could be more neatly lead. *E) 8D battery on the lower shelf, is set on a wood platform (appeared as secured to the battery via the single nylon strap); the platform's aft end is secured from athwart movement by the nav station seat pedestal while the *fwd. end appeared unsecured; *the platform and battery each needs to be secured in place ; see note 15A*.

*F) a cover needs to be installed on the "+" post on solenoid (installed above G27 battery)



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*16-- add net / additional slats, to open sided in cabin storage bins, to secure gear in any sea conditions.



16-- DC battery (1- G27 and 2-8D) 12v system is served by a Perko 8501 battery switch rated capacity @ 250 AMPS Continuous and 360 AMPS Intermittent. *Battery bank's out-put capacity needs to be calculated to insure that it does not exceed the switch's capacity. = = = = =

17-- Recommend add additional catch / latch to each in cabin locker door to insure that they remain closed regardless of sea conditions & / or movement of in-locker items. = = = = =

*18-- Dinette Table in folded up position is held in place via a single hook & eye fitting: *Replace hook-eye with a latch that can be secured from opening / giving way when running in rough sea conditions.*



19-- solar powered plastic vents installed (held in place via friction fit vent tube to on hatch fitting) on the 3- Bowmar deck hatches: *Recommend A) rig mechanical means (i.e. quick pin / clevis pin w/ hitch pin) to secure the vent to the on hatch press in fitting. B) Carry an inventory of deck plate insert to use in place of the solar vents when sea conditions make cause the decks to be awash with sea water.*



*20-- diesel tank fill hose shows cracked worn external surface: *Install new hose (type A2 fuel hose)*. = = = = =

21-- Suggest consider installing "Speed Seal" kit on the engine's raw water intake pump. = = = = =

22-- engine access panel (plywood) in cockpit lazarette should be fitted with a latch that secures it in the up / closed position regardless of sea conditions. = = = = =

*23-- *Gear stowed in the Cockpit Lazarette needs to be secured in place* (to preclude gear moving / breaking into the engine space and coming into contact with the propeller shaft or runs of engine exhaust hose, fuel tank fill hose, electric system wires and steering system components (in the lazarette) regardless of sea conditions).

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24-- Engine remote fuel filter: Recommend rig two remote fuel filters with a selector manifold and vacuum gauge so that in the event of a clogged filter a fresh filter is primed and ready for service via the selector valve. = = = = =

*25-- rig latch / other deployable device, on the Companionway Ladder (held in place via two drop in slot fittins, from which the ladder, in rough sea conditions, can jump-out of) that secures it in place regardless of sea conditions.

26--each portable fire extinguisher need to be secured in brackets, in visible / accessible locations. = = = = =

*27-- based on labeled DC panel switches, vessel is equipped with one DC powered Bilge Pump (sails other heavy canvas items stowed on cabin sole prevented access to keel sump / bilge; pump could not be sighted): *A) pump was not heard, when the panel manual "on" switch was engaged to power on. *Repair / replace as needed.*

B) Recommend, based on vessel size and planned offshore passage use; install additional DC powered bilge pumps in the keel sump & aft in the engine space and a bilge high water alarm. = = = = =

*28-- vessel (as indicated by labeled breakers at the 120v AC panel is equipped with a DC to AC Inverter, which was not located / sighted at the survey (gear stowed in cabin / screwed in place joinery panels may have blocked access): **Inverter's location needs to be sighted to determine that it is properly installed* - (*i.e. terminal / wire connections protected and has adequate natural ventilation ./ cooling*). = = = =

29-- LPG (galley stove) system: *A) tank pressure gauge (in tank locker) shows rusted external surface. B) DC solenoid (in tank locker) shows rusted surface. C) system / stove operating instructions & hazard warning label not installed at the stove. D) *Recommend update system to current ABYC standard; install a fuel supply solenoid shut off device near the stove.* [ABYC std. 1.7.3.1 The valve(s) or its control must be operable in the vicinity of the appliance in the event of a fire at any appliance. If the cylinder shut-off valve is readily accessible from the vicinity of the appliance, the shut-off valve on the supply line is not required.

30-- Suggest install gauges (engine control panel currently rigged with warning lights) for engine; oil pressure, cooling system temp and alternator DC volt output. =====

*31-- run of coax (white insulation) cable is coiled & laying loose unsupported / unsecured aft in the cockpit lazarette. = = = = =

*32-- navigation cables (white insulation); run from antennas (installed on mast aft port in cockpit) to the steering pedestal; *are laying loose / unsecured / in the open (exposed to weather) on the cockpit sole (*also present a trip & fall hazard).*



*33-- engine exhaust system: *Steel elbow, at exhaust hose to transom out let, shows heavily rusted external surface; *heavy rust residue on frp. hull surface below the elbow, indicates elbow / hose leak.



34-- Suggest add fold up steps to facilitate accessing cockpit port lazarette. = = = = =

*38-- anchor rode / forepeak locker: A) separated from the V-berth / cabin space by a vented teak panel board secured solely by a spring clip: *Teak panel board needs to be solid and secured in place (to preclude sea water or the anchor road from spilling into the cabin space)*. B) unknown if locker is fitted with a drain. If the locker is fitted with a drain or the drain appears inadequate to rapidly evacuate sea water flooding adequate sized drains need to be installed port & stbd., so that sea water can drain from the locker when the vessel is on a port or stbd. tack.



35-- bronze seacocks (in the head & under salon port settee) surfaces show thin white crust residue (possibly the product of stray current corrosion or sea water / MSD fluid leaks). (as accessed, at survey, seacocks appeared operational and sound no deterioration evident.)



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36-- Recommend install label on each rope clutch to denote their control line's function. = = = =

37-- Head's frp. pan / sole (when stood on) produced a crunchy sound and sagged slightly; indicating weakness / separation of the frp. laminate (from age / use) or deterioration of (not visible) underlying support structure. [Recommend consult with a marine frp. repair technician for additional assessment of the condition and advice regarding remediation / repair.] = = = = =

38-- Recommend, prior to any extended voyage, that the sails be inspected by a sail loft. = = = = =

39-- Recommend, prior to any extended voyage, that: A) mast & its fitting and the head stay be examined by a qualified rigger: B) the vessel be launched & commissioned, sails bent-on, all running rigging inplace and navigation electronics installed & connected and that a couple of trial runs be conducted to determine: i) the operational status of all systems & gear. ii) become familiar with each system's operating characteristics. iii) vessels sailing characteristics. Post those trial-runs down runs each systems should be re checked by qualified technicians.

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-End of Notes-

Submitted in good faith and without prejudice,

Frank T. Annu (x-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.**

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