"LUCKY STARS"

4/12/2012



## **Atlas Yacht Service**

Capt. R. E. Hughes MMS (321)431-1022 USCG MASTER LIC.# 1507628 ABYC NFPA US Surveyors Association # 389104

**Cover Page** 4/12/2012

## **Condition & Valuation Survey**

"LUCKY STARS" 1982 Southern Cross 35' Cutter HIN#: CER350050682



790 Mullet Rd. Suite #40 Cape Canaveral Fl. 32920



"LUCKY STARS"

#### Atlas Yacht Service, Inc. Marine Surveying 790 Mullet Rd. Suite #40 Cape Canaveral, Fl. 32920

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Hailing port: Melbourne Beach, Fl.

File #: RH41212 PURPOSE: Valuation & Insurance Date: April 12<sup>th</sup>. 2012

YACHT NAME: "LUCKY STARS" Survey Certified For: Robert Hannon 155 Bayshore Dr. Melbourne Beach, Fl. 32951

**1982** Southern Cross **35'** Cutter Manufacturer: C.E.Ryder

#### Hull Identification Number (HIN): CER350050682

#### USCG Documentation #: 651111

LOA:	BEAM:	DRAFT:	DEPTH:	NET Tonnage
35'2"	11' 4"	4'11''	8'3"	14

This survey was conducted at Harbortown Marina, Merritt Island Fl. while the vessel was hauled for maintenance. (New Bottom Paint, thru hulls and other) This vessel is registered for Recreation.

#### MARKET VALUE: \$ 57,500.00 REPLACEMENT VALUE: aprx. 169,000.00+/-Value derived using NADA, BUC and other comparables

**GENERAL CONDITION, INSURANCE RISK:** good, when the recommendations are

accomplished. This report should be considered as an entire document. No single section is meant to be used, except as part of the whole. It is current to the named client, underwriters, or lenders for 30 days of undisturbed lay-up or the vessel's first use.

CONSTRUCTION and Layout: Molded Fiberglass Reinforced Plastic (FRP) hull, composite

molded decks, cutter rigged sailing yacht . The master stateroom is forward V beth . Engine

room to center aft. Galley starboard with Microwave oven . Settees slide out into double berths

with lee cloths Head to port. All staterooms have privacy doors. Teak paneling and teak & holly

floors. Interior shows no signs of water leaks.

Chain plates were found to be well secured and all appeared in good condition with no signs of

cracks. Note all rigging was inspected eye level, all appears in good condition. New bottom

paint was being applied at time of survey. New Zincs, repacked stuffing box.

#### ENGINE: Universal 3 cyl. Diesel MODEL: UM- 24D

SERIAL #: 11248

Hourmeter: 1613 on new meter below strbd. Cockpit seat. Original meter shows 1141

wet exhaust thru water lift muffler and exits out the stern.

# A sea trial was not performed or any engine mechanical tests. All appear to be in good running condition.

Full Throttle RPM: n/a Oil PSI: n/a Temperature: n/a Cruise RPM n/a Coolant Temperature: n/a Exhaust Temperature: n/a Alternator Volts: n/a

Sea Strainer: Perko New condition

Has gauges for oil pressure, water temperature, volts, fuel level, hours, and tachometer, and has alarms.

Engine mounts are adjustable vibration isolators bolted to FRP & wood longitudinals in good condition.

Hose clamps are adequate stainless steel. Hoses are in NEW condition.

Fuel lines are approved. Has a CAV in line sediment strainer.

Fuel strainer, RACOR model #: 500 element 30 micro primary .

Oil Filter: : standard Oil Temperature: n/a

The throttle & clutch levers single at helm

### **TRANSMISSION:** HURTH HBW 100 Ratio: 2:1

Serial #: Could not read Temperature: n/a

Shaft packing gland, new dripless w/good hose with 4 stainless steel clamps Engine space ventilation is adequate for this installation.

## **GENERATOR:** none

### **FUEL Tankage and System:**

Molded FRP with a total capacity of about 35 gallons; properly secured, vented, baffled, and bonded.

No evidence of leaks.

Fuel shut off valve at the fuel tank

## WATER Tankage and System:

2 Plastic with a total capacity of about 90 gallons, properly vented and secured. tank level meter.

The water system is pressure on demand with vinyl hose plumbing and has a SS 6 gallon Balmar electric water heater with engine heat exchanger.

Fresh water pump: Par Max 3.4 gpm. And manual

Has shore water connection with pressure regulator, connected.

Holding Waste: fiberglass 25 gals.

## **UNDERWATER:**

HULL: Rounded with keel The antifouling coating is in NEW condition. The hull was sounded with a plastic hammer and appears to be in good condition.

PROPELLERS: 3 blade bronze,

SHAFT: 1" stainless steel in good condition where visible.

SHAFT BEARINGS: solid rubber cutlass appears in good condition

ANODES: 0 % deteriorated zincs. (new)

RUDDER: Skeg fiberglass in good condition.

THROUGH HULL FITTINGS: bronze, appear in NEW condition.

SEA VALVES are bronze ball valves appear in NEW condition.

## **ELECTRICAL SYSTEMS:**

The DC system is copper stranded wire with thermoplastic insulation. Wiring appears to be in compliance with USCG, NFPA, ABYC requirements. 12 volt with 4 batteries, Group size 27 and appear in good condition. Outlets on the 110v AC are not GFCI protected and are compliant to USCG, NFPA and ABYC recommendations. Battery cables are AWG # 1/0 with (3) vapor proof disconnect switches. DC system protection is by circuit breakers. BATTERY CHARGER: Newmar Phase III 40 amp The AC system is /110 volts with (1) 30 amp shore power connection 50' cords. The system is polarized and there is a polarity indicator. Have meters for volts and amps. AC system protection is by circuit breakers The outlets are not labeled. Cable type is UL marine approved. Hull fittings are grounded with # 10 AWG.

#### AIR CONDITIONER: window unit 110v

HEAD: (1) manual fore

Direct overboard discharge and holding tank (25gal) by "Y" valve

GALLEY: appliances are in serviceable condition unless noted. REFRIGERATION: Refrigerator with freezer 12v Frigibote holding plate system STOVE: Force 10-3 burner CNG w/ oven Open ventilation MICROWAVE OVEN: Samsung microwave SINK: One dbl. stainless steel sink with fresh water on demand pump 12v and manual foot pump

## FIRE FIGHTING EQUIPMENT:

Halon #10 \*\*

PORTABLE Fire Extinguishers: 2 dry chemical USCG size B-I, bow salon 2A-10BC ; salon forward.

The fire fighting system or installation is adequate when re-inspected and dated

## **BILGE DRAINAGE:**

Par diaphram, in the engine room, Whale gusher, portable gusher Manual Whale gusher pump

BILGES: clean

## **GROUND TACKLE:**

# 45 CQR with 30' BBB 5/16" chain and 110' nylon braid rode

35lb Danforth w/ 40' 3/8" chain and 100' 5/8" nylon rode

Docklines: 8-3/4" nylon

STEERING: Wheel with quadrant

**DECK HARDWARE:** Cleats and lines all were found in good condition. stainless steel. Barient winches: (2) #19 self tailing, (2)#38 self tailing

**DINGY:** none

Outboard engine: none at time of survey

Dodger

NOTE: all sails were stored in a sailbag and were not inspected, Informed by owner they were all in good condition.

Main sail

Genoa aprx. 120 percent

Head sail

ELECTRONICS and NAVIGATION: units are working unless otherwise stated. # 1 VHF Radio: Raytheon Ray 80 # 2 VHF Radio: Standard Hand held GLOBAL POSITIONING SYSTEM: Nautrek GPS (2) RADAR: none ANTENNA: VHF, FM, GPS in good condition. **DEPTH INDICATOR:** Signet AUTO PILOT: Navico P5000 STEERING: Main helm station has a stainless destroyer wheel, Helm COMPASS: 4" binnacle mounted No Deviation Table found Trimble Navigation NAV Trac XL GPS Furuno weather fax Weather instrument Speed Tech Hand Held VHF radios STEREO: Clarion satellite radio w/ 6 CD changer SONY blu-ray palyer Flat panel TV Chain quadrant steering system Weems & Plath barometer Bimini top over cockpit

## **SAFETY EQUIPMENT:**

PFDs: 4 Type II, 2 Type I RS Offshore w/ reflectors and strobe , Life sling, throw able Jim

Bouy

FLARES: Adequate. Expires 10/2012

EPIRB: none found

HORN: hand held

FOG BELL: 6" chrome brass.

SOUND SIGNAL: Hand held

NAVIGATION LIGHTS: proper for class and working

SPOTLIGHT: hand held

FLAMMABLE GAS FUME DETECTOR: Not required.

CARBON MONOXIDE DETECTION SYSTEM: None. Found\*

FIRST AID KIT: on board did not inspect

INFLATABLE LIFE RAFT: None.

BOW RAIL: single 7/8" SS in good condition.

Stainless steel boarding ladder.

LIFELINES: 1/4" vinyl coated stainless wire showing some signs of rust\*\*

#### MISCELLANEOUS:

There is a FEDERAL OIL POLLUTION sign.

There is a MARPOL TRASH placard. 33CFR 151.5. Display one in a visible location.

Navigation Rules Book: Not required, but suggested

to carry one on board.

#### **Primary Recommendations:**

- 1. Halon 1211 fire extinguisher last inspection date 6/06... have unit re-certified and dated
- 2. <sup>1</sup>/<sub>4</sub>" lifelines need replacement

### **Secondary Recommendations:**

- 1. Suggest the addition of a current EPIRB system if sailing more than 5 mile offshore
- 2. Maintain current level of scheduled maintenance

## Underwater: Bottom paint (anti-fouling) is in (NEW) condition All systems in working order

**CONCLUSION:** There is no apparent structural de-lamination, at the time of the survey the vessel appears to be a very good marine risk when the above recommendations are complied with.

#### Suggestions (Improvements):

 Install a UL Marine Listed CO detector in any occupied spaces below decks. This vessel uses fossil fuel for propulsion. During the burning of any of this fuel Carbon Monoxide (CO) gas may be created due to incomplete combustion. Adequate ventilation must be provided at all times while burning this fuel, but CO may also be drawn into the cabin through ventilation systems. CO is a silent menace and kills without warning

2.

### **Observations:**

This vessel will be classed in the above average condition, reflecting a rigid maintenance schedule.

#### **MAINTENANCE & ROUTINE SUGGESTIONS:**

Start a maintenance log and maintain it.

Change all filters and fluids in engine and transmissions now.

Change engines oil every 100 hours or every six months, whichever comes first

Change transmission oil every 500 hours or every year, whichever comes first.

Inspect the cooling system zincs every 60 days until a wear pattern is established, then at least every oil change depending on local conditions.

Regularly clean the heat exchangers about every two years depending on local conditions.

The exhaust riser should be cleaned with the heat exchangers and renewed when necessary usually every 3 to 4 years.

Renew the raw water impellers at scheduled engine maintenance

Check engine alignment now and annually.

Clean the sea water strainers as needed.

Inspect shaft packing gland before and after each use. Drip 1 to 10 times per minute while

turning and stop dripping after 30 minutes static.

Exercise sea valves monthly

Check operation of bilge pump automatic switches monthly.

Check smoke alarms and CO detectors monthly.

Inspect fire extinguishers monthly; renew 6 years from date of manufacture.

Test Ground Fault Circuit Interrupter monthly.

Check battery fluid level monthly.

Check operation of navigation lights one hour before sunset when underway.

Renew coolant hoses every five years.

Carry a basic tool kit, spare belts, fuel filters, oil filters, engine oil, hydraulic steering fluid small funnel, impellers, and a bucket.

UNDERWATER: Haulout and renew the antifouling coating at least every 2 years.

Check wear of cutlass bearings at each haulout.

#### STARTING THE ENGINE:

- 1. Check the oil and coolant levels, and open the sea valve.
- 2. Look at the accessory drive belt.
- 3. Look around to see if anything looks unusual.
- 4. Turn on the main battery switch.
- 5. Make sure the clutch lever is in neutral.
- 6. Start the engine.
- 7. Look at the oil pressure gauge to be sure that it comes up.
- 8. Go to the exhaust outlet to see if it is pumping cooling water.
- 9. If no water comes out after 1/2 minute, shut down the engine.
- If no water flows: check to see if the sea valve is open. Check if the sea strainer is clear.
  Check if the vee belt is tight. Check the pump impeller. Call a mechanic.

#### START THE GENERATOR SET.... if applicable

- 1. Check the oil level and coolant levels, and open the sea valve.
- 2. Look at the accessory drive belt.
- 3. Look around to see if anything looks unusual.
- 4. Turn on the main battery switch.
- 5. Hold the preheat button for about 20 to 30 seconds. This also overrides the low oil pressure safety shut off.
- 6. Same as 6 through 10 above for main engine.
- 7. Turn the air conditioners and water heater off.
- 8. Select "gen" switch at the main panel.
- 9. Turn on necessary circuits. The generator set may not carry every piece of equipment at once. Manage the load for what you need.
- An DC to AC inverter can be added to be used for small appliances such as: TV, microwave, lights, etc. Use the generator set for the heavy loads

#### SCOPE OF SURVEY:

This survey checks for compliance with U.S. Coast Guard & Code of Federal Regulations, American Boat and Yacht Council, Inc., Standards & Technical Information Reports for Small Craft, Underwriters Laboratory, and National Fire Protection Association standards and practices. It does not cover possible latent defects which could not readily be discovered by inspection without removal of machinery, tanks, sheathing, joiner work, upholstery, bulkheads, ceiling, fascia, fiberglass or metal covering, fasteners, or other fixed material, disassembly of machinery, plumbing, wiring, or other parts, components or systems. Unless specifically stated, no test borings have been made, and no destructive or invasive testing has been performed. The undersigned has conducted this survey and issued this report for the sole use of the specified requesting party for an agreed fee based upon the intended use of the report and the legal liability of the undersigned; accordingly, others are not to use this report and not rely upon the contents of this report without payment to the undersigned of an additional agreed fee based upon reevaluation of the same factors.

The recommendations, judgments, and conclusions expressed herein represent the opinion of the undersigned surveyor who has exercised reasonable care in conducting a routine visual marine survey of the subject vessel. This report contains opinions and observations based on my skill, experience and training as a marine surveyor and consultant. Under no circumstances shall this report be understood to constitute a representation, guarantee, or warranty, expressed or implied, of any kind as to the condition or soundness of the subject vessel, its hull, engines, machinery equipment or systems or any part of appurtenances thereof, or the cost of effecting any repairs or modifications.

Market Value is defined as the most probable price which a property should bring in a competitive and open market under all conditions requisite for a fair sale, the buyer and seller, each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus. Survey conducted without prejudice.

Replacement Value is defined as the cost of building a

new vessel of like or similar style in the current market situation and includes applicable freight and taxes

Attending Surveyor : Capt. Rick E. Hughes

Capt. Rick E Hughes

US Surveyors Association # 389104 USCG Lic. Master # 1507628

REFERENCES FOR COMMON RECOMMENDAT	IONS					
ABS is American Bureau of Shipping	www.eagle.org					
ABYC is the American Boat and Yacht Council	www.abycinc.org phone 410 956 1050					
ANSI is American National Standards Institute	www.ansi.org					
CFR is the United States Code of Federal Regulations						
ISO is International Standards Organization	www.iso.org					
NFPA is the National Fire Protection Association	www.nfpa.org					
UL is Underwriters Laboratories, Marine Division	www.ul.com/marine					
US Coast Guard:	www.uscg.mil					
Fire Extinguishers, Portable - ABYC A-4.6; 46 CFR 2	25.					
Fixed Fire Extinguishers In Enclosed Engine Compar						
Fog Bell: 46 CFR 25.05, ABYC A-23.5. 33 CFR 80,	Navigation rules 33, Annex III.					
Horn or Whistle: ABYC A-23.5. 33 CFR 80:						
Navigation Lights: 46 CFR 25.05, USCG Cmdt. Inst.	M16672, Navigation Rules, Part C. ABYC A-16					
Flares - 46 CFR 28.145. Water tight container for flar	es: 46 CFR 180.35-10					
Non Metallic Fuel Hoses, fire resistant - USCG TYPE	E A-1, USC 46-CFR 183.590, UL 1114, ISO 7840.					
SAE 1527, ABYC H-24.6 & H-33.6, NFPA	302-5-6.2.2.					
Double Clamp Fuel Fill Lines - USC 46-CFR 183.564	4, ABYC H-24(33) , NFPA 302-5-6.3.7.					
Support Fuel Lines - NFPA 302- 5-6.2.5. ABYC H-2	4.7.					
Mark Fuel Fill - NFPA 302-6.3.6., ABYC H-24(33).	12.					
EPIRB, 46 CFR 28.260.						
Carbon Monoxide Detection System: ABYC A-24. U	L 2034.					
Flammable Gas Fume Detectors for gasoline and LPC	6: ABYC, A-14:					
PFD (lifejackets) 46 CFR 180.25						
Life Raft, 46 CFR Tables 28.120:						
Master Battery Switch - NFPA 302-7-11.2., ABYC E						
Secure Batteries - NFPA 302-7-4.3, 33 CFR 183, AB						
Cover Battery Terminals - NFPA 302-7-4.5., 7-14.9 & for more than 1 conductor. Exception: 1 additional conductors Reverse Polarity Indicator For 120 Volt Shore Power	nnection to $a + or - bus$ or stud for that purpose.					
Ground Fault Circuit Interrupter (GFCI) for wet space	es - NFPA 302-8-12.1., ABYC E-11.13.1, UL 943.					
Support Electrical Wiring Every 18" - NFPA 302-7-1	4.6. ABYC E-11.16.4.1.10					
Do Not Use Wire Nuts - NFPA 302-8-15.11., ABYC	E-11.16.3.6					
Lightning Protection - NFPA 302-2-3., ABYC E-4.						
Ignition Protected Devices - 33 CFR 183.410, UL 150						
Propane Bottle Locker - NFPA 302-6-5.12.1., ABYC						
LPG Systems - ABYC A-1 & Galley Stoves A-3. Seacocks - ABYC H-27. And easy to operate H-27.7.	•					
Hull Identification Number: 33 CFR 181, subpart C; A						
Toilet, USCG Marine Sanitation Device (MSD) 33 CFR 159. ISO WD 8099.						
Bilge Alarm, High Water Level. 46 CFR 28.250. ABYC H-22.8.14 note.						
Anchoring, Ground Tackle: 46 CFR 28.235, ABYC H-40.						
Boarding Ladder ABYC H-41.9 Navigation Rules Book: to be carried Vessels over 12 meters: 33 CFR 88.05, COMDTINST M16672.2D.						
Travigation Rules DOOK. TO be callied vessels Over 12	$\frac{110015}{1000}, \frac{55}{100}, \frac{1100}{2.2D}.$					