Vessel Survey Mikelson Yachts 59' Sportfisher Twin MTU 8V183-TE93 2014

SURVEY AS OF May 10th 2014 1st QTR of full down-to-hull REFIT

DESCRIPTION:

Make: Mikelson Yachts undergoing 2014 refit on Shelter Islands Nielsen Beaumont Marine by Greg Moore Marine and San Diego Boat Electric 1220 Rosecrans st 939 SD CA 92106 phone 619-218-1018 web

mooregreg.com

Model: Mikelson Model 60 1500HP total

Model Type: Sport Fisherman

Year: 1994 Hull, complete refit 2014/15

Length: 58.5' Beam: 17' 2" Draft: 4' 6"

Headroom: interior deck to overhead 7ft' Flybridge: 23ft long X 14 ft wide base Hardtop glass front windows, Canvas

sides

Weight: 55,000 lbs

Engine Twin MTU 8V183-TE92 Mercedes equal 442LA

Fuel Type: Diesel

Fuel Tankage: 1100 gal 4 tanks Water Tankage: 240 gal centered fwd

Holding Tankage: 100 gal

Sump tank: 50 gallons/rule bilge system

Genset-2: Onan 15 kw total 30 kw

120/240 single phase

Hull Material: Fiberglass Location: San Diego, CA

TWO LEVEL COCKPIT SPORTFISHING

Extra large flybridge

TUNA TOWER FULL CONTROL

SLEEPS 12

2- STATEROOMS 3 BATH - 5 SHOWER UPPER FLYBRIDGE ENCLOSED GLASS LOW PROFILE AND WINDAGE

HIDDEN CHAIN ROPE ANCHOR SYSTEM

4 BILGE PUMPS AUTO MANUAL

2 HIGH WATER ALARMS LUBE OIL CHANGE SYSTEM

2 ONAN GENERATORS/ REMOTES

WATER MAKER

SALON ELECTRICAL CONTROL

REAR FLYBRIDGE CONTROL STATION

BAIT AC DC 3 TANKS TUNA TUBES

EACH HEAD EASY CONTROL

3 OVERBOARD WASTE SELECT SW

6 8D BATTERIES DEEP CYCLE AIR CONDITIONING AND HEATING

EXTRA WIDE SALON WINDOW VIEW LONG RANGE HULL STILL USED TODAY

THRU HULL VALVE EVERY HULL ENTRY

Model 8v 183-TE 92- 1DS package or mercedes 442 LA

Engines: All specs verified by Greg Moore marine engineer

Application: Fast ships and yachts. 3000hrs/yr fuel stop 1 of 6 hrs.

Qty: two 8 cylinders diesel turbo

92-490KW/657HP @2300

93- 564kw/756 hp @ 2400 RPM Most power to weight ratio Sleeved cylinder liners Dry weight 1500 kg/3300 pounds

Weight/trannys dry1695kg/wet 1800 (4000lbs)

serial numbers:

S/N 442.901-520-729024 S/N 442.901-520-738356

MTU/ZF Engine dimensions

L 47"(1200) with tranny mm ($67^{43}/_{64}$ in. (1250mm)

W 1330 mm (52²³/₆₄in) max 1330 width

H 1200 front, 1245 aft/deep pan to expansion tank

 $(47\frac{1}{64} \text{in fwd}, 49(1205))$ aft max

Serial D 442 041 00 01 51011-01-32-86

Engine only, box size tape readings:

L1405 (55 5/16 X W1330 (52 1/64) X 1240 (47 1/4)

GEAR box tranny

ZF 1RM350A.1 Transmission specs 1100 HP @ 3000

RPM Pleasure rating 20 inch (50mm) Long

Reduction: 2.077 to 1 670 hp @2300 1172hp@3000rpm

S/N 93-07172 S/N 93-06476

Exhaust

4- 3 inch elbows. 6" stainless flex coupling, 8 inch exhaust tubing stainless into 12 inch exhaust outlet to muffler.

Shaft

2.5 inch stainless 8 inch coupler/12 bolt, shaft has 7 inch aft clearance for any longer in line engines. Wet gland/packing repacked.

Other Repowered Engines that will fit: cost \$260-270,000 Cat 3406E 800hp, 3408 560 hp, C9 560 hp, C18 acert

Man: MAN R6-800 800hp german

Cummins: QSM-11 Detroit 8V-92

ENGRAVED LABELS THROUGHOUT
GOOD STRINGER DRAINAGE AND SUMPS
HUGE SUMP PUMP
ELECTRIC DAVIT CRANE
LIFE RAFT
NAVIGATION AND FISHING ELECTRONICS
4 ICE MAKERS
1 BBQ 1 3 ELECTRIC BURNER STOVE
1 REFRIGERATOR
1 WASHER DRYER

Salon dimensions:

Overhead, 145" wide X 169" Long Deck 88" wide X 134" L

Dingy mount dimensions 1-1/4 rail fit 14 ft dingy

The flybridge lower Cap OD: 23ft long and 14ft wide

2- triple 10"fender holder fwd.35" D MSR hatch24" dia head hatches

COCKPIT

Lowest lower cockpit in industry. You can easily reach over side and touch water to release a fish or help a swimmer back on board. The transom is strong and wide and a large back hatch not only lets passengers aboard with ease but a big black marlin comes in that entrance too. Shower, fresh and salt washdown, gas grill, tackle box and to big bait tanks all in lower cockpit. Deck lights below and above and large hatch and scuppers drains. By far one of the best fishing cockpits found anywhere in the world.

Upper cockpit

The view deck and lounge is large and up and away from the action of the hooks and gaffs. It has a large head and shower with sink, cabinetry and easy engine room access with great overhead lighting and LED deck lights. Its your view and patio to the sea.

MTU

CYLINDER LINERS SLEEVES GEAR DRIVEN CAM STEEP CAM LOBES SPLASH LUBED THROUGHOUT BOSCH INJECTOR 1000 MBAR bOOST REFRACTORY ALLOY STEEL VALVES **ELECTRONIC GOVERNOR** SPLASH LUBE FUEL PUMP, TURBO SELF CONTAINED COOLANT **DUAL THERMOSTATS MASSIVE DUCTS** V BELT CENTRIFUGAL COOLANT PUMP EXCEPTIONALLY WELL COOLED ENGINE. **FUEL TANK TRANSFER SYSTEM** HIGH GRADE WELL INSULATED EXHAUST SYSTEM SUPERB ENGINE MOUNTS AND TRANSMISSION GEAR PLENTY OF ROOM TO WORK IN ENGINE ROOM GREAT ENGINE ROOM LED WET PROOF LED LIGHTING 12/24 VOLT START converter- GAUGES- ALTERNATORS ARMORED ELECTRICAL and Sensor CABLES METAL LABELS AND ENGINE ROOM START LOCAL MECHANICAL GAUGES AT ENGINES EASY TO REACH OIL PAN AND FITTINGS 8 INDIVIDUAL HEADS AND EXTRA COOLING DUCTING 12 POINT BOLTS AFTER COOLER **BLOCK HEATERS** STAINLESS COOLANT TANK SUPERB SENSOR AND SHUT DOWN SYSTEM SUPERB NEW GEAR DRIVEN OIL PUMPS

LIGHTWEIGHT MILLED FROM SOLID ALUMINUM

Galley dimensions

Overhead 94 wide X 85 long
Counter 85" X 22 inch deep
Galley floor 49L X 70 wide
Refer 24 D X 25.5 wide with max 49W X 69 tall
Trash compactor High 30 1/4" X 12 wide
Stove max D 22" X 24.75" W X 35 tall

Beginning of refit state of project and key members.

The vessel sank at dock or there would never have been a chance like this to restore this great boat from the hull up. It sank due to fresh water hose fitting coming off and was under for 4 hours at dock. 4 bilge pumps and alarms were also inoperative. We also found the tanks were full of fresh water. It appeared during discovery that while the dock water pressure line was connected to the boat with an endless source of new fresh water. With no bilge pumps or high water alarms working, the vessel finally went nose down at dock. It was too much for her and she rolled stbd and layed for a couple hours before salvage team came. Only the flybridge was still out of water. Insurance paid for the total loss of \$440,000 and later sold the vessel through an international auction to Amooring LLC. Amooring hired Moore Marine for the rebuild.

Neilson and Beaumont marine righted the vessel within hours, flushed everything with fresh and pickled all the engines with diesel fuel but it sat for an extended period of time before Moore Marine opened up the heads. Upon discovery the engine needs a rebuild and fortunately the mercedes of course is sleeved and built for easy repair.

This type of sinking also gives the refiter and engineers a perfect opportunity to redo an otherwise perfectly good vessel to **better than new** or like new. In the end this vessel will be not just be a seasoned

cohesive system already proven, it will be perfect and renewed from anchor light all the way down to each bilge pump switch. Moore marine will do some interior design and fabrics and canvas work but Amooring LLC wants the boat to work nice before it looks nice.

To accomplish this, Sea Star will need and has been having every major component replaced. The best parts of being a Mikelson Yacht here in San Diego will be kept and enhanced and a few deck redesigns where Tom Fexas left out things back in 1994 and they now put on their new boats. Like better deck drains, full steering station in salon, jet ski racks, better cockpit decking, a see thru the hull and into water window in the guest stateroom, a flybridge rear deck extension, a bullwark in front of bridge, lots more anchor chain, better fuel consumption and modern tier 3 air california pollution standards. All the other areas like plumbing, stringers, hull, drive lines, tanks are all proven as AOK and still timeless. In every case the decision as to what to replace a component with will be to exceed what was done in the 90's.

Priority will be to Start with electrical. The vessel must be 100% safe at the dock. Then into the engine room, and out to the exterior cosmetics from the hull up to new paint right before show. Greg Moore Marine will be responsible for the repairs and they do everything in house, including the paint. Amooring wants their engineer aboard at all times.

Moore marine background:

Serving in San Diego since the 80s for doing US Navy and ABS grade marine work and yachts. They don't do many commercial fishing boats but have a few boats that have won the bisbees like Mil So Mar and Jalapeno. Moore's ex navy electronics guy. After he got out he got his electrical engineering degree on the GI BILL. He started Power and Wind marine electronics. Its grew quick but Moore sold his share to Leonard Pool and jumped at a chance to help John Knight build over a dozen big custom yachts as their 1st real engineer and engineering department. Other than John and Hugo Greg was the first hired to do the designs when they were rapidly growing. Those were very large custom yachts that have went around the world and back.

Moore's done thousands of sailboats and powerboats that have went long range cruising and back with almost no complaints. Boat builders and yards don't do what Moore does. This boat will be made ready for mexico and beyond because every little decision will have the big picture and tiniest details supporting it.

Moore's work dates back to 1983 when Fred Duckets big steel work boat the TEMPTATION was redone. Gregs work orders dating back to his retailing days at power and wind show over 25,500 marine (mobile or dockside) rebuilds or repairs. Included were rewires, sailboat and powerboat commissioning. We checked on 4 of his complete engine rebuilds, A boat called Fish Fetish marina village G dock had two mercruiser 350 small block gas rebuilt and were happy. We asked 2 sport fishers one with 3208 cat engines, the other with cummins 550 horsepower and they said he also rebuilt the turbos. We like that the responsible party is the one guy doing the work. Not sitting back in the office.

Moore says "No offense to Mikelsons great and long lasting designs but my goal is to "restore it to better than new or what they would do today" Greg Moore says "Everyone would like to sell you a 2 million dollar yacht solution but I create the same dreams at a third of the price." Sounds like a boat builder challenge to the Mikelson Brokers who won't be very happy about the possibility of losing a new 2 million dollar boat sale. In reality, it shows the great life expectancy of a well built yacht.

Refit estimated to be 4500 hrs plus \$240,000

The Mikelson 60 Sportfisher is already a rugged offshore fishing boat with a dramatic profile and plenty of features you won't find on other production boats. Once Greg Moore gets done with this refit and brings it back into the 2014 safety zone, it's features will be close to buying a new luxury custom yacht. One costing upwards 1.8 million.

She has a very efficient Tom Fexas hull design requiring relatively small engines for her huge size. This makes her more economical to run due to her very low load factor and shallow planning draft.

The cockpit features a unique upper deck platform that overlooks the lower fishing cockpit with good shade visor built in. The lower cockpit is wide open overhead with a huge fishing area. A marlin fighting chair is surrounded behind with bait systems and tanks galore. Big wide wood cap rails around the cockpit ad safety and beauty. The decks and hatches drains are efficient during washdowns and flooding.

The flybridge is huge with a wrap around helm console and plenty of seating. The captains chair is an aircraft grade rated for 3 G's and ice makers, ice chest, dining table, refrigerator and great night lighting make this cockpit one of the best in the world. Breath taking view area for a large group of people.

The owners guest can have the entire lower level to themselves and an entire crew can easily sleep up

top. .

The interior features plenty of teak paneling throughout. Two staterooms sleep 5. The salon is quite spacious and furnished with leather furnishings. 12 total can sleep below decks.

The U-shaped galley is well equipped for preparing meals underway. This vessel is a great live aboard and nice dock condo but make no mistake its setup to hunt big game, in all types of sea conditions. Its sleek and designed to shed off and slice through the highest seas with small boat maneuverability. Out on deep blue water, far offshore there's no reason to be scared. Every thru hull and bottom penetration are build like a ship.

30 knots, no problem. Return faster than anyone back to marina. be all washed up and ready to go out to dinner before your buddies get back. Hole up in a nice harbor to party the night away or lock the boat and relax in a comfortable climate controlled spacious house. A nice wide and strong swim step and boarding hatch is at the aft and on foredeck a dinghy launch davit will pick up vee bottom tenders and jetskis. Also up forward is a power feed to feed other boats juice.

The boat feels more like a much bigger long range boat. Seven foot ceilings OMG that feels great when standing and stretching. Its hull is low to water and its profile gives a small wind profile. It could be handled by one man.

The Mikelson 60 is fairly quiet underway due to her unique underwater exhaust system which also reduces odors and offers other performance side effects. A good performer in a range of condition, she'll cruise at 23 knots and top out at 26 knots or go 6-7 knots and not much changes in the way the boat handles or floats on heavy seas.

The engine room has several access doors and hatches and plenty of room on all sides of all 4 diesels to do maintenance. Huge fuel tanks, range is yet to be determined but estimated one fuel stop to Cabo San Lucas. Two Onan generators have plenty of power and backup reliability and air conditioning and heating is in every cabin. The boat uses a central vacuum system. It also has more storage and areas to put clothes and food than most 85ft boats.

The window design gives every angle and every view imaginable without allowing others to view you. Windows in showers, by bed pillows, in galley and at sink let everyone on board see the horizon and sky.

The flybridge is huge and has a huge round table for excellent top floor penthouse views. Yet those enclosed hardtop panels and solid windows will suppress the loudest flybridge party. If a sea gull does a boo boo on your windows just use the washer wipers. The boats flybridge has an aft steering station for controlling the boat while watching the anglers lines. You can easily see what the fish is going to do and prevent it from getting into props. Above the flybridge is a tuna tower with full controls and electronics for an ospreys nest view of the oceans vast wilderness.

Under the decks are some of the best plumbing and stringer glass work I've seen on any production boats. below decks really have that high end feel. All the thru hulls, plumbing and wiring is excellent and labeled. The way everything has engraved labels for a quick glance is easy to determine what hose and valve goes to which device. In emergencies, this is a must and yet rarely done on production boats.

Once this vessel has been brought up to professional top marine standards during 2014 & 2015, its re-launch will provide not just a fully restored and mint like new condition" yacht but one without bugs and broken in to running like a fine tune watch. The boat will be put through sea trial and tested extensively for a certification of tuning and calibration. It will be truly offshore ready for its maiden voyage into Mexico, up to Alaska and beyond..

Systems under refit please Greg Moores blog for latest photos

Living layout and home like appliances
Light switches complete replacement
Light fixture complete replacement
Sump pump replacement/switch/new control switch
All new engine room lighting
All new deck lighting and exterior
2- generator plant complete rebuild
New fuel transfer system
New oil transfer pump

Installed All new outlets

New AC bait pump Model premier 255mk2-5 motor only mod. 4403220411 fr. 48Y 1/2 hp 3450 rpm 7.8 amps

5 new reading lights in cabins

Reversing switch added to fuel transfer system.

Salt water pump change out to new

Aft deck bathroom head system rebuild.

All new forward cabin lights switches and outlets

New salon Dc power selector switch

Renew all Fishing systems

Comforts and luxury items

Air Conditioning renewal and ducting replacement

Kitchen and galley upgrades new countertop, full size refrigerator

Bathrooms and all new toilet rebuilds X 3

Food storage upgrades

Personal storage and laundry room remodel

Battery room, new cables and batteries

All new salon electrical panel meters

New fresh water pressure system

Fresh water tanks flushed 20 times

New salon valance LED lighting

New electrical panel swivel lighting

12 volt DC power and branch circuits

120-240 vac power

Fuel, fills, vents and tanks

Main engines Port and Stbd

Two electric AC power generators

One small boat tender and davit launching system

Driving stations bridge and flying bridge tower

Seawater to freshwater systems

Outside showers hot and cold fresh or cold salt washdown

Anchoring and safety rails

Navigation and communication electronics

Energy and engine performance monitoring.

Alarms and safety systems

Life saving equipment and mandatory CG items

Decks and exterior overheads.

Hull fiberglass and wood paint and condition above the waterline

Below the waterline hull, with thru hulls and propulsion

Lube oil change system

High water 5 bilge pump automatic and manual

Sewer pump out

Electrical technology and controls

Docking, windows and all access

Inventory of equipment

Life raft sealed can non inspected/rack RpR Industries 2"X35"L

80 amp 4 bank charger ships DC supply, new transformer and 8 diodes and amp meters 200 amps dc alternators

2- 15 kw Onan generators and sound shields

Flybridge Electronics

two furuno nav net

aft station plotter

Trimble nobeltec computer

Kenwood TKM 707 SSB and 507 VHF

Inverter newmar 12-2500IC 120 volt quasi sine wave

Furuno network sounder

New Blowers model 129898-125-001 2807-406-059 8 amp 12 volt

Electric wipers and washers

2 newmar electrical panels rebuild/new breakers

Norcold DE-251 E AC/DC ice maker

Robertson autopilot

Standard radio aft station VHF

- 2 outriggers
- 2- 9db antennas
- 3-6 db 8 ft whip antennas/rachet laydown

Epirb 406 mhz lokota LHR

Cockpit

Head motor Jabsco 37010-000-12, motor only 74000-2460, 3 perko bimini lights 12 vdc with switches Deck Lights 100% LED

Fridge Norcold DE 451 AC/DC

BBQ jenn air

DC and AC bait pump DC washdown pump aft and fwd

Tuna tower

VHF depth sounder Sitex AVS 107 Icom m59 VHF Ritchie compass 2 engine on lights Engine synchro control

Engine shift and throttles, steering

KVH Tracvision 4 stabilized three axis antenna dome and programmer

Galley

Stove

Refer

Microwave