Birely Marine Services Inc.BIRELY MARINE SURVEYOR AND CONSULTANT

Bertram 60 "Sample"



MEMBER OF SOCIETY OF ACCREDITED MARINE SURVEYORS

Report of Marine Survey

Of The Vessel

''Sample''

Bertram 60

Conducted by Captain Douglas Birely SA

Sample

October 23, 2012

TABLE OF CONTENTS

SECTION		PAGE NO.	
I.	INTRODUCTION	1	
II.	GENERAL INFORMATION	2	
III.	SYSTEMS	6	
	HULL DECK AND SUPERSTRUCTURE	6	
	CABIN APPOINTMENTS	8	
	PROPULSION	10	
	FUEL SYSTEM	12	
	ELECTRICAL SYSTEMS	13	
	FRESH WATER SYSTEM	15	
	SANITATION	16	
	STEERING SYSTEM	17	
	GROUND TACKLE	17	
	ELECTRONICS AND NAVIGATION EQUIPMENT	18	
	THRU-HULLS	19	
	SAFETY EQUIPMENT	19	
	OUT OF WATER INSPECTION	21	
	AIR CONDITIONING AND HEAT (AIR CONDITIONING)	22	
	SEATRIAL REPORT	22	
	ENGINE SURVEY SUMMARY	23	
IV.	FINDINGS AND RECOMMENDATIONS	24	
V.	SUMMARY AND VALUATION	35	
VI.	PHOTOGRAPHS	38	

I. INTRODUCTION

SCOPE OF SURVEY

Acting at the request of Sample the attending surveyor did attend onboard the "Sample" beginning on 10/23/12 where an "in-the-water-survey" WAS conducted at Sailfish Marina Palm Beach, Fl. The ship's papers were on board and appeared to be in order. The Hull Identification Number (HIN) WAS verified from the transom. A sea trial WAS performed. An out-of the water inspection of underwater machinery and the exterior of the hulls wetted surface area WAS performed. The reason for the survey, was to ascertain the physical condition and value of the vessel. Moisture readings taken and referenced throughout the body of the report, were taken with the Sovereign Moisture Master meter. AC and DC power WAS used to check operation of the electrical systems specified in this report only. No reference or information should be construed to indicate evaluation of the internal condition of the engines or the propulsion system's operating capacity. Electronic equipment was checked for "power up" only.

This vessel was surveyed without removals of any parts, including fittings, tacked carpet, screwed or nailed boards, anchors and chain, fixed partitions, instruments, clothing, spare parts and miscellaneous materials in the bilges and lockers, or other fixed or semi-fixed items. Locked compartments or otherwise inaccessible areas would also preclude inspection. Owner is advised to open up all such areas for further inspection. Further, no determination of stability characteristics or inherent structural integrity has been made and no opinion is expressed with respect thereto. This survey report represents the condition of the vessel on the above dates, and is the unbiased opinion of the undersigned, but it is not to be considered an inventory or a warranty either specified or implied.

CONDUCT OF SURVEY:

THE MANDATORY STANDARDS PROMULGATED BY THE UNITED STATES COAST GUARD (USCG), UNDER THE AUTHORITY OF TITLE 46 UNITED STATES CODE (USC); TITLE 33 AND TITLE 46, CODE OF FEDERAL REGULATIONS (CFR), AND THE VOLUNTARY STANDARDS AND RECOMMENDED PRACTICES DEVELOPED BY THE AMERICAN BOAT AND YACHT COUNCIL (ABYC) AND THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAVE BEEN USED AS GUIDELINES IN THE CONDUCT OF THIS SURVEY.

The use of the word "appears" is intended to indicate that a close or complete inspection was not possible or it was not deemed appropriate at the time of this survey. The deficiencies reported herein reflect the conditions observed at the time the survey was conducted.

Use of asterisks * in the body of the report will indicate that a finding will be listed in the *Findings and Recommendations* section pertaining to the asterisked item, following the body of the report.

Note:

An engine surveyor was on board during the hull survey and performed a separate survey on the vessel's propulsion system. Questions about the condition of this system should be addressed to that survey.

GENERAL INFORMATION

1759 SURVEY PREPARED FOR: Sample NAME OF VESSEL: "Sample" TYPE OF SURVEY: **Pre-Purchase for Buyer** **** AVERAGE ESTIMATED MARKET VALUE: \$500,000.00 BUILDER: **Bertram** 2000 YEAR BUILT: MODEL OF VESSEL: Convertible HULL IDENTIFICATION NUMBER (HIN): Sample HAILING PORT: Sample USCG DOCUMENTATION NUMBER: Sample USCG DOCUMENTED FOR: Recreational PLACE OF SURVEY: Sailfish Marina Palm Beach, Fl October 23, 2012 HULL MATERIAL: FRP (Fiber Reinforced Plastic). HULL TYPE: Planing, Modified-V with round bottom, lifting chines, and flared bow. 60' 16' 11" BEAM: 5' 6" DRAFT: 9' DEPTH: 59 47 NET TONS: PROPULSION SYSTEM: (2) Twin Diesels. FUEL TYPE: Diesel. FUEL CAPACITY: **1630** gals Yes, Two (2) 220 volt, 50 amp. Inlets Yes, 12/24 volt. 250 gals.

HOLDING TANK:	Yes

DEFINITION OF TERMS:

The terms and words used in this report have the following meanings as used in this Report of survey:

APPEARS:

Indicates that a very close inspection of the particular system, component or item was not possible due to constraints imposed upon the surveyor(e.g. no power available, inability to remove panels, or requirements not to conduct destructive tests).

FIT FOR INTENDED USE:

Use which is intended by Survey Purchaser(present or prospective owner).

SERVICEABLE: ADEQUATE:

Sufficient for a specific requirement.

POWERS UP:

Power was applied only. This does not refer to the operation of any system or component unless specifically indicated.

EXCELLENT CONDITION:

New or like new.

GOOD CONDITION:

Nearly new, with only minor cosmetic or structural discrepancies noted.

FAIR CONDITION:

Denotes that system, component or item is functional as is with minor repairs. (MONITOR OFTEN)

POOR CONDITION:

Unusable as is. Requires repairs or replacement of system, component or item to be considered functional.

USE OF *:

Use of * in the body of this report will indicate that a finding will be listed in the "Findings and Recommendations" section pertaining to the * item.

Asterisks * in this General Information section refers to the source of such information as follows:

- * Per Manufacturer's Specifications
- **Refer to Summary and Valuation Section
- *** Per USCG Documentation

DEFINITION OF TERMS:(continued)

**** Per Buc Book

HULL DECK AND SUPERSTRUCTURE

HULL CONSTRUCTION

TYPE:

Modified-V, planing type, with flared bow, hard chines.

MATERIAL:

FRP (fiber reinforced plastic)

EXTERIOR HULL:

*B1, B2, B3, B4

White gelcoat with blue boot top, and moderate sheer.

BULKHEADS:

*B5

Athwartships reinforcement enhanced by wood bulkheads bonded to the hull with FRP (fiber reinforced plastic).

STRINGERS:

*B6, B7

Hull stiffness provided by FRP longitudinal stringers. Complete inspection not possible due to limited access. Appears serviceable where observed.

TRANSOM:

*B8

Reinforced, FRP slightly rounded.

BILGE:

A smooth surface was used in the shallow bilge area.

CHAIN LOCKER (DRAINAGE):

The chain locker is forward and accessible through an access in the forward cabin.

MOISTURE CONTENT:

None noted.

DECK CONSTRUCTION

TYPE

Molded FRP (fiber reinforced plastic) with non-skid surface.

MATERIAL:

*B9

Cored FRP (fiber reinforced plastic) with white painted non-skid surface.

COCKPIT:

Yes

HULL DECK AND SUPERSTRUCTURE

HULL-TO-DECK JOINT

TYPE:

Over Lapping

BEDDING COMPOUND:

Appeared to be elastomeric compound.

DECK FITTINGS

STANCHIONS:

Welded aluminum rail system, runs 3/4 the perimeter of the vessel.

VENTILATION:

*B10

Total of Three (3) hatches.

CHOCKS AND CLEATS:

Eight (8) stainless steel 12" cleats.

WINDLASS/GIPSY:

Yes

GRAB RAIL:

*B11

Grab rails on cabin house. (see photos)

ANCHOR PLATFORM:

Yes FRP platform with removable anchor bow roller assembly. Appears serviceable.

SUPERSTRUCTURE

MATERIAL:

*B12

Cabin house and deck are one unit molded FRP (fiber reinforced plastic).

WINDOWS/PORTS/DOORS:

The sides of cabin house has large sliding windows. The entrance door to the main salon opens on to the cockpit.

BRIDGE DECK

MATERIAL:

*B13, B14

FRP (fiber reinforced plastic) molded flybridge.

TYPE:

Bridge provides helm station and crew seating.

HULL DECK AND SUPERSTRUCTURE

BRIDGE DECK(continued)

SEATS:

*B15

Pedestal mounted swivel chairs and bench seats.

BIMINI:

*B16, B17

Hard top.

WINDSHIELD:

*B18, B19

Canvas and clear plastic curtains surround the flybridge helm station.

FISHING EQUIPMENT

FIGHTING CHAIRS:

A fighting chair is pedestal mounted in the cockpit.

LIVE BAIT WELLS:

*B20, B21

A live bait well is located to starboard. It is FRP (fiber reinforced plastic) cylindrical in shape capacity of approximately 30 gallons and has an electric water re-circulation pump.

WASH DOWN SYSTEM:

*B22

Both fresh water and salt water wash down hose bibs are available at the forward cockpit side.

FISH BOX(S):

Yes

OUTRIGGERS:

Rupp triple spreader outriggers both port and starboard. Appears serviceable.

UNDER WATER LIGHTS:

*B23, B24

Yes

CABIN APPOINTMENTS

INTERIOR DESCRIPTION:

JOINERY AND FINISH:

The joinery and finish of the oak interior was average.

CABIN APPOINTMENTS

INTERIOR DESCRIPTION:(continued)

CABIN BRIGHT WORK:

*B25

High gloss varnish finish. Appeared serviceable.

INTERIOR BULKHEADS:

The interior bulkheads were finely fit where sighted.

WATER INTRUSION SIGNS:

*B26

Yes

STORAGE AREAS:

*B27

The cabinets, lockers, drawers, and shelving are provided.

HEADLINERS:

*B28, B29

Headliner material in the cabins appeared to be a light colored vinyl. Appeared serviceable.

DOORWAYS:

*B30

Solid wood cabin and head doors throughout vessel. Appeared serviceable.

FLOOR AND WINDOW COVERINGS:

Floor coverings are carpet in the cabins and vinyl in galley.

ACCOMMODATIONS:

Three cabins.

HEADS:

*B31

Three heads.

SHOWERS:

There are stand up shower enclosures in the heads and they drain to the main greywater sump. They operate and appears serviceable.

FAUCET FIXTURES:

*B32

Faucet and fixtures in the vessel were on demand.

LIGHT FIXTURES:

DC cabin lights throughout the vessel were operable.

CABIN APPOINTMENTS

INTERIOR DESCRIPTION:(continued)

TELEVISIONS:

Two (2) Panasonic 13". Powers up.

Vizio 31" Powers up.

STEREO, ETC.:

*B33, B34

Technics: RS TR272. Powers up. Technics: SL PD6. Powers up. Technics: SA AX540. Powers up.

Two (2) Clarion: DRX S675. Powers up.

Mosh: SA AK29. Powers up.

GALLEY

LOCATION:

Port salon.

SINKS:

Double molded in sinks.

REFRIGERATION:

*B35

Stand alone refrigerator and freezer units built into galley cabinets are by Sub Zero.

STOVE/OVEN:

Kenyon: Four (4) burner. Burners power up.

MICROWAVE:

GE. Powers up.

WASHER/DRYER:

Whirlpool

TRASH COMPACTOR:

*B36, B37

GE: Monogram

ICE MAKER:

Scotsman. Powers up.

PROPULSION

MAIN ENGINES

TYPE:

Two (2) Diesel

PROPULSION

MAIN ENGINES(continued)

MANUFACTURER: Caterpillar: 3412

SERIAL NUMBERS:

Port: Starboard:

LABELS AND NOTICES:

The engines were new and all required labels appeared to be in place and readable.

HORSE POWER:

1400 hp

NUMBER OF CYLINDERS:

Twelve (12) in a V configuration.

INDICATED HOURS:

Port hours 6230. Starboard hours 6228.



Bertram 60' 012.JPG



Bertram 60' 013.JPG

THROTTLE CONTROLS:

Micro Commander

ENGINE MOUNTS AND BED:

Main engine bed is heavy longitudinal stringers. In conjunction, adjustable motor mounts are bolted to the stringers and are used to adjust the propshaft alignment as well as secure the engines to the hull stringer structure.

VENTILATION:

Power blowers with flex tubing appears adequate. Natural, flow ventilation provided by cowl vents.

BILGE BLOWERS:

Yes Power Up

PROPULSION

MAIN ENGINES(continued)

EXHAUST SYSTEM:

*B38, B39

Raw water cooled stainless steel pipes to outboard frame supports. Flexible hose aft to FRP (fiber reinforced plastic) silencers located under the cockpit sole. Then exiting through fittings at transom. Hose to pipe connections are double clamped where sighted.

PROP SHAFTS:

Stainless steel 3" diameter. Appeared serviceable.

ENGINE SYNCHRONIZER:

Synchronization is provided by a Caterpillar.

STUFFING BOX:

Dripless type.

COOLING SYSTEM

TYPE:

Freshwater reservoir type cooling with raw water cooled wet exhaust.

HOSES AND CLAMPS:

*B40

Re-inforced rubber hose.

SEACOCKS AND STRAINERS:

Raw water seacocks were ball valve type.

TRANSMISSIONS

MANUFACTURER:

ZF

Port: Sample Starboard: Sample

GEAR RATIO:

Transmission tag: 2.03 to 1 ratio.

PACKING GLAND:

Dripless

FUEL SYSTEM

MAIN ENGINE(S) FUEL SYSTEM

FUEL TYPE:

Diesel.

MATERIAL:

FRP (fiber reinforced plastic).

FUEL SYSTEM

MAIN ENGINE(S) FUEL SYSTEM(continued)

NUMBER OF TANKS:

Three (3)

HOSE CONNECTIONS, CLAMPS:

*B41, B42

Yes



Bertram 60' 042.JPG

ELECTRICAL SYSTEMS

ELECTRICAL SYSTEM (D.C. SYSTEM)

VOLTAGE:

Lead acid battery powered 12/24 volt system.

MAIN BATTERY SWITCHES:

Type: Guest rotary selector.

CHARGING SYSTEM:

Alternators on main diesel engines and diesel generator no readable tags. Appears serviceable.

CHARGING SYSTEM (BATTERY CHARGER):

Two (2) Type: Marine grade 110 volt. Dolphin 24 volt 50 amp.

ELECTRICAL SYSTEM (A.C. SYSTEM)

SHORE POWER INLET:

*B43

Two (2) 220 volt, 50 amp, Glendening Cable Masters.

AC SOURCE SELECTOR SWITCH:

Switch type: Manual rotary type. AC / Generator:

MAIN BREAKER:

Yes, Under cockpit coming.

ELECTRICAL SYSTEMS

ELECTRICAL SYSTEM (A.C. SYSTEM)(continued)

CIRCUIT LOAD MONITORS:

Yes voltage and amperage analog gauges in the main electric panel. For both the AC and DC systems.

OUTLETS:

Various A.C. outlets available throughout yacht, appear adequate and conveniently located.

GENERATORS AND INVERTERS

TYPE:

Generator driven by diesel powered internal combustion engine,

MANUFACTURER:

Kohler: Sample Northern Light: Sample

FUEL TYPE:

Diesel.

KILOWATT RATING:

20 kw

VOLTAGE RATING:

110 /220 AC.

NUMBER OF CYLINDERS:

Four (4)

INDICATED HOURS:

Port 3578 hrs on meter. Starboard 1742 hrs on meter.



Bertram 60' 010.JPG

COOLING SYSTEM:

Freshwater and raw water wet exhaust type.

ELECTRICAL SYSTEMS

GENERATORS AND INVERTERS(continued)

FUEL FILTER:

Remote Racor filter/water separator and engine mount spin on/off type.

EXHAUST SYSTEM:

*B44

Aqua lift type FRP (fiber reinforced plastic).

FRESH WATER SYSTEM

FRESH WATER SYSTEM: (POTABLE WATER)

STORAGE TANKS:

Yes, one (1).

MATERIAL:

Tank material appeared to be FRP.

ACCUMULATOR TANK:

Yes.

PUMPS:

Shallow well on demand water pump.

Note: The old fresh water is still in place.

FILTERS:

Yes, in line at pump.

HOSES AND CLAMPS:

PVC pipe, and reinforced plastic tubing at various areas throughout vessel. Appears serviceable where sighted.

FRESH WATER SYSTEM (HOT WATER SYSTEM)

TYPE:

110 electric. Household type.

MANUFACTURER:

Rheum

CAPACITY:

Not Determined, estimate to be nineteen (19).

PRESSURE RELIEF VALVE:

Yes, copper pressure relief valve built into tank.

FRESH WATER SYSTEM

FRESH WATER SYSTEM (WATER MAKING SYSTEM)

TYPE:

*B45

Yes, a FCI unit was in place but was not in service.

Note:

The water maker was reportedly in the out of service mode intentionally to protect the membranes and the system in general while the vessel was in port. I suggest that the system be serviced and tested before being put back into regular use.

SANITATION

SANITATION (BLACK WATER)

MANUFACTURER:

Raritan, electric flush.

MANUAL OR ELECTRIC TYPE:

*B46

All heads electrically operated for flush and waste treatment.

NUMBER OF HEADS:

Three (3) heads on vessel.

M.S.D TYPE USCG SYSTEM:

Certification Type: MSD U.S.C.G. Type III. (Holding tanks)

DISCHARGE HOSES AND CLAMPS:

*B47

Thru-hulls at macerator locations.

MACERATOR:

Yes, and electrical treatment.

"Y" VALVES:

Yes, a "Y" valve is provided.

HOLDING TANK:

Yes

SANITATION (GREY WATER)

BASINS, SHOWERS, HOSES AND CLAMPS:

The shower on this vessel drains into a sump pan.

SUMP TANK LOCATION:

Midships bilge area, centerline.

MATERIAL:

Plastic, specific type not determined. Appears serviceable.

SANITATION

SANITATION (GREY WATER)(continued)

PUMPS:

Sump pump with float switch. Operable.

STEERING SYSTEM

STEERING SYSTEM

TYPE:

Hydraulic, by Hynautic, where sighted appeared serviceable.

NUMBER OF STATIONS:

One (1) main helm station.

PRESSURE/RESERVOIR TANK READING:

*B48

Gauge reading 5 lbs.

ACTUATOR CYLINDER:

*B49

Appears serviceable.

UPPER RUDDER BEARING SUPPORT:

*B50

Well mounted and the bronze upper rudder bearing.

PACKING GLAND:

*B51

Dripless

GROUND TACKLE

GROUND TACKLE

ANCHORS:

Type: Plow style. Size: Approx: 30 lbs.

RODE MATERIAL:

5/8" 3 braid marine grade nylon, approximately 150' feet.

WINDLASS:

*B52, B53

Simpson & Lowernce

ELECTRONICS AND NAVIGATION EQUIPMENT

ELECTRONICS AND NAVIGATION EQUIPMENT

VHF:

Icom: IC-M59. Powers up. Icom: IC-M127. Powers up.

RADAR:

Furuno: GA AS Powers up.

GPS:

*B54

Furuno: GP 1850 WD.

CHART PLOTTER:

Northstar: 6000i. Powers up.

AUTOHELM:

Simrad: AP20. Powers up.

FISH FINDER:

Furuno: FCV 1000. Powers up.

COMPASSES:

8" Danforth

HAILER:

Standard Horizon. Powers up.

NAV TEX:

Furuno: NX300. Powers up.

LORAN C:

*B55

Northstar: 800.

CELLULAR PHONE:

Motorola

SINGLE SIDE BAND RADIO:

*B56

Icom: ICM 710.

SATELLITE PHONE:

KVH Tra Phone.

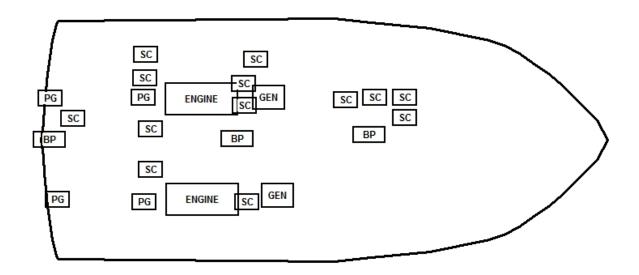
SATELLITE TV:

KVH: Tra Vision 4.

THRU-HULLS

THRU-HULLS:

THRU-HULLS BELOW WATER LINE (DIAGRAM):



Abbreviation	Description
BP	Bilge Pump
ENGINE	Engine
GEN	Generator
PG	Pkng Gland
SC	Seacock

^{**}Black Icon(s) with white text indicates inoperable item.

SAFETY EQUIPMENT

SAFETY EQUIPMENT (UNITED STATES COAST GUARD)

NUMBER AND TYPE OF PFD'S:

Eight (8) Type I-U.S.C.G. approved.

Six (6) Type Il-U.S.C.G. approved.

NUMBER OF THROWABLE PFD'S:

One (1) Type IV-U.S.C.G. approved throwable device.

FIRE EXTINGUISHERS:

Four (4) Three (3) 3 lb.dry chemical and a FE 241 95 lb. fixed engine room system. 3/12

VISUAL DISTRESS SIGNALS:

Flares were 12 gauge Day/night visual distress signals and hand held flares. 6/13

SAFETY EQUIPMENT

SAFETY EQUIPMENT (UNITED STATES COAST GUARD)(continued)

SOUND DEVICES:

*B57

None Sighted.

NAVIGATION LIGHTS:

*B58

Sidelights are operable. Sternlight is inoperable. Anchor light is inoperable.

"NO OIL DISCHARGE" PLAQUE:

Yes, found properly displayed in engine space.

TRASH DISPOSAL PLACARD:

Yes, found properly displayed in the galley area.

AUXILIARY SAFETY EQUIPMENT

LIFE RAFT:

*B59

Two (2) Switlik: 6 man. 9/05



Bertram 60' 054.JPG

E.P.I.R.B.:

*B60

Yes, SAT 406, class I. 1/11

Note

Get this E.P.I.R.B registered in your name with your boats ID as soon as possible.

SAFETY EQUIPMENT

AUXILIARY SAFETY EQUIPMENT(continued)

BILGE WATER ALARM AND SAFETY SWITCHES:

*B61

Yes

SEARCH LIGHT:

*B62

Yes, ACR

BILGE PUMPS

LIST:

Yes. Three see thru-hull diagram. Appear operable.

OUT OF WATER INSPECTION

BELOW WATERLINE MACHINERY

PROPELLER(S):

*B63

Two (2) bronze alloy, five bladed propellers.



Bertram 60' 027.JPG



Bertram 60' 028.JPG

SHAFT BEARING (CUTTLESS BEARING):

*B64

Cuttless bearing showed signs of wear and sloppiness or end play.

STRUTS:

Single I-beam strut.

RUDDER(S) MATERIAL:

Two (2) Cast bronze.

TRIM TABS:

Bennett trim hydraulic tabs operated normally. (see photos)

OUT OF WATER INSPECTION

BELOW WATERLINE MACHINERY (continued)

TRANSDUCERS:

Yes

STRAINERS/SCOOPS/SCREENS:

Main engine pickup strainers are external bronze alloy slotted type. Appear serviceable.

ZINCS:

Two shaft zincs and one hull zinc were observed, appeared serviceable. (see photos)

CONDITION OF HULL (WETTED SURFACE)

BLISTERS:

None Sighted.

CONDITION OF BOTTOM PAINT:

*B65

Bottom paint is thin and is in need of repainting.

AIR CONDITIONING AND HEAT (AIR CONDITIONING)

AIR CONDITIONING AND HEAT (AIR CONDITIONING)

TYPE:

Split system.

MANUFACTURER:

*B66, B67

Cruise Air.

NUMBER OF UNITS:

Four (4).

HOSES, CLAMPS AND CONNECTORS:

Appear to be adequately sized.

RAW WATER COOLING PUMP:

110 volt electric pump system is equipped with a seacock and sea strainer assembly. Appears serviceable.

SEATRIAL REPORT

INTRODUCTION

INTRODUCTION:

The "Sample" was operated from the Sailfish Point Marina between the hours of 12:00 to 1:15. The vessel was operated by Frank Pitale.

SEATRIAL REPORT

OBSERVATIONS

OBSERVATIONS:

- 1. The engines started without excessive cranking.
- 2. The engine exhaust appeared normal.
- 3. The cooling water exhaust appeared adequate and normal.
- 4. The engine instruments operate within normal operating limits at idle, cruising speed, and maximum throttle.
- 5. Engines reached 2340 RPM at full throttle.
- 6. The steering system operated normally.
- 7. The throttles operated normally.
- 8. The transmissions operated normally/smoothly.
- 9. The backdown test was satisfactory.
- 10. There were no excessive vibrations noted.
- 11. The engine synchronizer worked properly, autopilot was tested and the trim tabs operated normally.
- 12. There were no oil or coolant leaks observed. (On main engines or in exhaust water)

PERFORMANCE DATA

SPEED DATA:

RPM, KNOTS 1900, 29.2 2100, 31.4 Pinned

Port: 2340 34.1 Starboard: 2324

ENGINE SURVEY SUMMARY

ENGINE SURVEY

ENGINE SURVEY PERFORMED BY:

Stafford Diesel Inc.

Deficiencies noted under "SAFETY" should be addressed before vessel is next underway. These findings represent an endangerment to personnel and/or the vessel's safe and proper operating condition. *Findings may also be in violation of U.S.C.G. regulations*.

Deficiencies noted under "OTHER DEFICIENCIES" should be corrected in the near future so as to maintain standards and to help the vessel to retain it's value.

Deficiencies will be listed under the appropriate heading:

- A. SAFETY DEFICIENCIES
- B. OTHER DEFICIENCIES NEEDING ATTENTION
- C. SURVEYORS NOTES AND OBSERVATIONS

B. OTHER DEFICIENCIES NEEDING ATTENTION:

B.1 (PAGE 6) EXTERIOR HULL:

White gelcoat with blue boot top, and moderate sheer.		
FINDINGS RECOMMENDATIONS		
There is a chip in the gelcoat on the under side of the anchor platform.	Further investigate and repair as necessary.	

B.2 (PAGE 6) EXTERIOR HULL:

White gelcoat with blue boot top, and moderate sheer.	
FINDINGS	RECOMMENDATIONS
The water line is scratched in places.	Further investigate and repair as necessary.

B.3 (PAGE 6) EXTERIOR HULL:

White gelcoat with blue boot top, and moderate sheer.		
FINDINGS	RECOMMENDATIONS	
There is a stress crack under transom door.	Further investigate and repair as necessary.	

B.4 (PAGE 6) EXTERIOR HULL:

White gelcoat with blue boot top, and moderate sheer.		
FINDINGS RECOMMENDATIONS		
There is a chip in the gelcoat by the starboard trim tab.	Further investigate and repair as necessary.	

B.5 (PAGE 6) BULKHEADS:

Athwartships reinforcement enhanced by wood bulkheads bonded to the hull with FRP (fiber		
reinforced plastic).		
FINDINGS	RECOMMENDATIONS	
The forward bulkhead anchor locker hatch is	Further investigate and repair as necessary.	
loose.		

B. OTHER DEFICIENCIES NEEDING ATTENTION:

B.6 (PAGE 6) STRINGERS:

Hull stiffness provided by FRP longitudinal stringers. Complete inspection not possible due to limited access. Appears serviceable where observed.

minied access. Appears serviceable where observed.		
FINDINGS	RECOMMENDATIONS	
The port engine room table under the battery is	Further investigate and repair as necessary.	
showing signs of decay.		

B.7 (PAGE 6) STRINGERS:

Hull stiffness provided by FRP longitudinal stringers. Complete inspection not possible due to		
limited access. Appears serviceable where observed.		
FINDINGS	RECOMMENDATIONS	

B.8 (PAGE 6) TRANSOM:

Reinforced, FRP slightly rounded.		
FINDINGS	RECOMMENDATIONS	
The transom door latch is corroded.	Further investigate and repair as necessary.	

B.9 (PAGE 6) MATERIAL:

Cored FRP (fiber reinforced plastic) with white painted non-skid surface.		
FINDINGS	RECOMMENDATIONS	
The anchor platform deck has a chip.	Further investigate and repair as necessary.	

B.10 (PAGE 7) VENTILATION:

Total of Three (3) hatches.	
FINDINGS	RECOMMENDATIONS
The deck hatches finish is failing.	Further investigate and repair as necessary.

B.11 (PAGE 7) GRAB RAIL:

Grab rails on cabin house. (see photos)	
FINDINGS	RECOMMENDATIONS
The paint on the hand rails is blistered.	Further investigate and repair as necessary.

B.12 (PAGE 7) MATERIAL:

Cabin house and deck are one unit molded FRP (fiber reinforced plastic).	
FINDINGS	RECOMMENDATIONS
The superstructure has stress cracks on the starboard aft house.	Further investigate and repair as necessary.

B. OTHER DEFICIENCIES NEEDING ATTENTION:

B.13 (PAGE 7) MATERIAL:

FRP (fiber reinforced plastic) molded flybridge.	
FINDINGS	RECOMMENDATIONS
The dash board synchro switch is loose.	Further investigate and repair as necessary.

B.14 (PAGE 7) MATERIAL:

FRP (fiber reinforced plastic) molded flybridge.	
FINDINGS	RECOMMENDATIONS
The upper radio box back is loose and missing	Further investigate and repair as necessary.
screws.	

B.15 (PAGE 8) SEATS:

Pedestal mounted swivel chairs and bench seats.	
FINDINGS	RECOMMENDATIONS
The helm pedestal mounted seats cushions are	Further investigate and repair as necessary.
torn.	

B.16 (PAGE 8) BIMINI:

Hard top.	
FINDINGS	RECOMMENDATIONS
The hard top lights are inoperable.	Further investigate and repair as necessary.

B.17 (PAGE 8) BIMINI:

Hard top.	
FINDINGS	RECOMMENDATIONS
The starboard cockpit hard top light is inoperable.	Further investigate and repair as necessary.

B.18 (PAGE 8) WINDSHIELD:

Canvas and clear plastic curtains surround the flybridge helm station.	
FINDINGS	RECOMMENDATIONS
The clear plastic curtains stitching is failing.	Further investigate and repair as necessary.

B.19 (PAGE 8) WINDSHIELD:

Canvas and clear plastic curtains surround the flybridge helm station.	
FINDINGS	RECOMMENDATIONS
The starboard track for the plastic curtains is failing.	Further investigate and repair as necessary.

B. OTHER DEFICIENCIES NEEDING ATTENTION:

B.20 (PAGE 8) LIVE BAIT WELLS:

A live bait well is located to starboard. It is FRP (fiber reinforced plastic) cylindrical in shape capacity of approximately 30 gallons and has an electric water re-circulation pump.

11 5 5	1 1
FINDINGS	RECOMMENDATIONS
The support for the bait well hatch are failing.	Further investigate and repair as necessary.

B.21 (PAGE 8) LIVE BAIT WELLS:

A live bait well is located to starboard. It is FRP (fiber reinforced plastic) cylindrical in shape capacity of approximately 30 gallons and has an electric water re-circulation pump.

of approximatery 50 gamons and has an electric water re-circulation pump.	
FINDINGS	RECOMMENDATIONS
The bait well pump is corroded.	Further investigate and repair as necessary.

B.22 (PAGE 8) WASH DOWN SYSTEM:

Both fresh water and salt water wash down hose bibs are available at the forward cockpit side.	
FINDINGS RECOMMENDATIONS	
The salt water wash down is inoperable and the	Further investigate and repair as necessary.
hose bib is loose.	

B.23 (PAGE 8) UNDER WATER LIGHTS:

Yes	
FINDINGS	RECOMMENDATIONS
The port under water light is out.	Further investigate and repair as necessary.

B.24 (PAGE 8) UNDER WATER LIGHTS:

Yes	
FINDINGS	RECOMMENDATIONS
The port under water light wiring box is loose.	Further investigate and repair as necessary.

B.25 (PAGE 9) CABIN BRIGHT WORK:

High gloss varnish finish. Appeared serviceable.	
FINDINGS	RECOMMENDATIONS
The veneer over the microwave is cracked and is loose on the master closet door.	Further investigate and repair as necessary.

B.26 (PAGE 9) WATER INTRUSION SIGNS:

Yes	
FINDINGS	RECOMMENDATIONS
There are signs of water intrusion around the port salon windows and aft cabin door.	Further investigate and repair as necessary.

B. OTHER DEFICIENCIES NEEDING ATTENTION:

B.27 (PAGE 9) STORAGE AREAS:

The cabinets, lockers, drawers, and shelving are provided.	
FINDINGS RECOMMENDATIONS	
The hall closet door trim is missing and the master locker doors over the bulk supports are failing.	Further investigate and repair as necessary.

B.28 (PAGE 9) HEADLINERS:

Headliner material in the cabins appeared to be a light colored vinyl. Appeared serviceable.	
FINDINGS	RECOMMENDATIONS
The headliner in the salon is loose.	Further investigate and repair as necessary.

B.29 (PAGE 9) HEADLINERS:

Headliner material in the cabins appeared to be a light colored vinyl. Appeared serviceable.	
FINDINGS RECOMMENDATIONS	
The day head headliner is corroded around the	Further investigate and repair as necessary.
hatch.	

B.30 (PAGE 9) DOORWAYS:

Solid wood cabin and head doors throughout vessel. Appeared serviceable.	
FINDINGS	RECOMMENDATIONS
The forward cabin door binds on the trim.	Further investigate and repair as necessary.

B.31 (PAGE 9) HEADS:

Three heads.	
FINDINGS	RECOMMENDATIONS
	Further investigate and repair as necessary.
missing on the bottom of the bulk heads.	

B.32 (PAGE 9) FAUCET FIXTURES:

Faucet and fixtures in the vessel were on demand.	
FINDINGS	RECOMMENDATIONS
The faucets on the vessel are corroded.	Further investigate and repair as necessary.

B. OTHER DEFICIENCIES NEEDING ATTENTION:

B.33 (PAGE 10) STEREO, ETC.:

Technics: RS TR272. Powers up. Technics: SL PD6. Powers up. Technics: SA AX540. Powers up. Two (2) Clarion: DRX S675. Powers up.

Mosh: SA AK29. Powers up.

FINDINGS	RECOMMENDATIONS
The two Clarion cabin stereos volumes are	Further investigate and repair as necessary.
inoperable.	

B.34 (PAGE 10) STEREO, ETC.:

Technics: RS TR272. Powers up. Technics: SL PD6. Powers up. Technics: SA AX540. Powers up.

Two (2) Clarion: DRX S675. Powers up.

Mosh: SA AK29. Powers up.

FINDINGS	RECOMMENDATIONS
The starboard forward salon speaker is	Further investigate and repair as necessary.
inoperable and the forward cabin speaker grill	
is off.	

B.35 (PAGE 10) REFRIGERATION:

Stand alone refrigerator and freezer units built into galley cabinets are by Sub Zero.	
FINDINGS	RECOMMENDATIONS
The center refrigerator is inoperable.	Further investigate and repair as necessary.

B.36 (PAGE 10) TRASH COMPACTOR:

GE: Monogram	
FINDINGS	RECOMMENDATIONS
The trash compactor is loose.	Further investigate and repair as necessary.

B.37 (PAGE 10) TRASH COMPACTOR:

GE: Monogram	
FINDINGS	RECOMMENDATIONS
The trash compactor key is missing.	Further investigate and repair as necessary.

B.38 (PAGE 12) EXHAUST SYSTEM:

Raw water cooled stainless steel pipes to outboard frame supports. Flexible hose aft to FRP (fiber reinforced plastic) silencers located under the cockpit sole. Then exiting through fittings at transom. Hose to pipe connections are double clamped where sighted.

FINDINGS	RECOMMENDATIONS
The main engines exhaust hoses are cracked.	Further investigate and repair as necessary.

B. OTHER DEFICIENCIES NEEDING ATTENTION:

B.39 (PAGE 12) EXHAUST SYSTEM:

Raw water cooled stainless steel pipes to outboard frame supports. Flexible hose aft to FRP (fiber reinforced plastic) silencers located under the cockpit sole. Then exiting through fittings at transom. Hose to pipe connections are double clamped where sighted.

FINDINGS	RECOMMENDATIONS
The main engines exhaust cooling hoses are	Replace with new marine grade hose.
cracked.	

B.40 (PAGE 12) HOSES AND CLAMPS:

Re-inforced rubber hose.	
FINDINGS	RECOMMENDATIONS
The main engine raw water cooling hose is cracking.	Replace with new marine grade hose.

B.41 (PAGE 13) HOSE CONNECTIONS, CLAMPS:

Yes	
FINDINGS	RECOMMENDATIONS
The forward tank fuel hose fittings are	Further investigate and repair as necessary.
corroded.	

B.42 (PAGE 13) HOSE CONNECTIONS, CLAMPS:

Yes	
FINDINGS	RECOMMENDATIONS
The fuel hoses are cracked.	Replace with marine grade fuel hoses.

B.43 (PAGE 13) SHORE POWER INLET:

Two (2) 220 volt, 50 amp, Glendening Cable Masters.	
FINDINGS	RECOMMENDATIONS
The starboard Cable Master is inoperable.	Further investigate and repair as necessary.

B.44 (PAGE 15) EXHAUST SYSTEM:

Aqua lift type FRP (fiber reinforced plastic).	
FINDINGS	RECOMMENDATIONS
Generators exhaust hoses are cracked, clamps are missing and mixers are failing.	Further investigate and repair as necessary.

B. OTHER DEFICIENCIES NEEDING ATTENTION:

B.45 (PAGE 16) TYPE:

Yes, a FCI unit was in place but was not in service.

Note:

The water maker was reportedly in the out of service mode intentionally to protect the membranes and the system in general while the vessel was in port. I suggest that the system be serviced and tested before being put back into regular use.

FINDINGS	RECOMMENDATIONS
The water maker was reportedly in the out of	I suggest that the system be serviced and tested
service mode intentionally to protect the	before being put back into regular use.
membranes and the system in general while the	
vessel was in port.	

B.46 (PAGE 16) MANUAL OR ELECTRIC TYPE:

All heads electrically operated for flush and waste treatment.	
FINDINGS	RECOMMENDATIONS
The master head is inoperable.	Further investigate and repair as necessary.

B.47 (PAGE 16) DISCHARGE HOSES AND CLAMPS:

Thru-hulls at macerator locations.	
FINDINGS	RECOMMENDATIONS
The head discharge hose clamps are corroded.	Install new marine grade full stainless steel
	clamps.

B.48 (PAGE 17) PRESSURE/RESERVOIR TANK READING:

Gauge reading 5 lbs.	
FINDINGS	RECOMMENDATIONS
The steering reservoir is reading low on the	Further investigate and repair as necessary.
pressure gauge 5 lbs. Should be 25-35 lbs.	

B.49 (PAGE 17) ACTUATOR CYLINDER:

Appears serviceable.	
FINDINGS	RECOMMENDATIONS
Steering actuator tie bar has play in it.	Further investigate and repair as necessary.

B.50 (PAGE 17) UPPER RUDDER BEARING SUPPORT:

Well mounted and the bronze upper rudder bearing.	
FINDINGS	RECOMMENDATIONS
There is play in the rudders.	Further investigate and repair as necessary.

B. OTHER DEFICIENCIES NEEDING ATTENTION:

B.51 (PAGE 17) PACKING GLAND:

Dripless	
FINDINGS	RECOMMENDATIONS
Rudder packing glands are weeping.	Repack.

B.52 (PAGE 17) WINDLASS:

Simpson & Lowernce	
FINDINGS	RECOMMENDATIONS
Windlass cover plat is missing.	Further investigate and repair as necessary.

B.53 (PAGE 17) WINDLASS:

Simpson & Lowernce	
FINDINGS	RECOMMENDATIONS
Windlass is inoperable.	Further investigate and repair as necessary.

B.54 (PAGE 18) GPS:

Furuno: GP 1850 WD.	
FINDINGS	RECOMMENDATIONS
The Furuno GPS is inoperable.	Further investigate and repair as necessary.

B.55 (PAGE 18) LORAN C:

Northstar: 800.	
FINDINGS	RECOMMENDATIONS
The loran is inoperable.	Further investigate and repair as necessary.

B.56 (PAGE 18) SINGLE SIDE BAND RADIO:

Icom: ICM 710.	
FINDINGS	RECOMMENDATIONS
The single side band is inoperable.	Further investigate and repair as necessary.

B.57 (PAGE 20) SOUND DEVICES:

None Sighted.	
FINDINGS	RECOMMENDATIONS
No sound device onboard.	Comply with USCG regulations for Sound Devices.

B.58 (PAGE 20) NAVIGATION LIGHTS:

Sidelights are operable.	
Sternlight is inoperable.	
Anchor light is inoperable.	
FINDINGS	RECOMMENDATIONS
Not all navigation lights are operable.	Further investigate and repair as necessary.

B. OTHER DEFICIENCIES NEEDING ATTENTION:

B.59 (PAGE 20) LIFE RAFT:

Two (2) Switlik: 6 man. 9/05	
FINDINGS	RECOMMENDATIONS
Raft does not have a current inspection tag.	Have the life raft inspected and repacked by
	authorized personnel, mark and prepare stowage
	area for ready deployment.

B.60 (PAGE 20) E.P.I.R.B.:

Yes, SAT 406, class I. 1/11	
Note: Get this E.P.I.R.B registered in your name with your boats ID as soon as possible.	
FINDINGS	RECOMMENDATIONS
The E.P.I.R.B. battery tag is out of date.	Renew battery test and mark for inspection.

B.61 (PAGE 21) BILGE WATER ALARM AND SAFETY SWITCHES:

Yes	
FINDINGS	RECOMMENDATIONS
Hight water bilge alarms are inoperable on the test switch on the dash.	Further investigate and repair as necessary.

B.62 (PAGE 21) SEARCH LIGHT:

Yes, ACR	
FINDINGS	RECOMMENDATIONS
The search light is inoperable on the up and down function.	Further investigate and repair as necessary.

B.63 (PAGE 21) PROPELLER(S):

Two (2) bronze alloy, five bladed propellers.	
FINDINGS	RECOMMENDATIONS
Starboard propeller has three (3) blades out of	Recondition
alignment.	

B.64 (PAGE 21) SHAFT BEARING (CUTTLESS BEARING):

Cuttless bearing showed signs of wear and sloppiness or end play.	
FINDINGS	RECOMMENDATIONS
Shaft bearing show signs of wear and end play.	Investigate further. Replace as necessary. By a full
	service by an expert.

IV. FINDINGS AND RECOMMENDATIONS

B. OTHER DEFICIENCIES NEEDING ATTENTION:

B.65 (PAGE 22) CONDITION OF BOTTOM PAINT:

Bottom paint is thin and is in need of repainting.	
FINDINGS	RECOMMENDATIONS
Bottom paint is thin.	Sand and repaint.

B.66 (PAGE 22) MANUFACTURER:

Cruise Air.	
FINDINGS	RECOMMENDATIONS
The AC drain pans are corroded.	

B.67 (PAGE 22) MANUFACTURER:

Cruise Air.	
FINDINGS	RECOMMENDATIONS
The master and forward AC units are inoperable.	Further investigate and repair as necessary.

NOTE: If cruising more than 25 nautical miles offshore it is also recommended that a USCG approved self-inflating life raft be fitted to the vessel. And a first aid kit and small manual watermaker be added to the ships safety gear.

V. SUMMARY AND VALUATION

STATEMENT OF OVERALL VESSEL RATING OF CONDITION:

It is the surveyor's experience that develops an opinion of the **OVERALL VESSEL RATING OF CONDITION** After a the survey has been completed and the findings have been organized in a logical manner.

The grading of condition, developed by **BUC RESEARCH**, and accepted in the marine industry, for a vessel at the time of survey, determines the adjustment to the range of base values in the **BUC USED BOAT PRICE GUIDE**, for a similar vessel sold within a given time period, as a consideration to determine the Market Value.

The following is the accepted marine grading system of condition:

- "EXCELLENT (BRISTOL) CONDITION", is a vessel that is maintained in mint or bristol fashion usually better than factory new loaded with extras a rarity.
- "ABOVE AVERAGE CONDITION", has had above average care and is equipped with extra electrical and electronic gear.
- "AVERAGE CONDITION", ready for sale requiring no additional work and normally equipped for her size.
- "FAIR CONDITION", requires usual maintenance to prepare for sale.
- "POOR CONDITION", substantial yard work required and devoid of extras.
- "RESTORABLE CONDITION", enough of hull and engine exists to restore the boat to usable condition.

As a result of my investigation, as shown in the **SYSTEMS AND FINDINGS AND RECOMMENDATIONS** section of this **REPORT OF SURVEY**, and by virtue of my experience, my opinion is

O_{I}	VF.R	AII	VESS	EL R	ATIN	ıc.
\mathbf{v}		ALL		LLI	Alli	١ Ū٠

AVERAGE

V. SUMMARY AND VALUATION

STATEMENT OF VALUATION:

1. The **"FAIR MARKET VALUE"** is the most probable price in terms of money which a vessel should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller, each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus.

Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- a. Buyer and seller are typically motivated.
- b. Both parties are well informed or well advised, and each acting in what they consider their own best interest.
- c. A reasonable time is allowed for exposure in the open market.
- d. Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
- e. The price represents a normal consideration for the vessel sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

Therefore, after consideration of the reliability of the data, the extent of the necessary adjustments and condition of the vessel, it is your surveyor's opinion that the "FAIR MARKET VALUE" of the subject vessel is:

\$500,000.00

Five Hundred Thousand Dollars and Zero cents

V. SUMMARY AND VALUATION

SUMMARY:

In accordance with the request for a marine survey of the "Sample", for the purpose of evaluating its present condition and estimating its Fair Market Value. I herewith submit my conclusion based on the preceding report. The subject vessel was personally inspected by the undersigned on 10/22/12 and was found to be a well constructed, appointed and comfortable vessel. Subject to correction of deficiencies listed in section IV A. (Safety), the vessel is considered to be suitable for its intended use. Other deficiencies list should be attended to in a timely fashion.

SURVEYOR'S CERTIFICATION:

I certify that, to the best of my knowledge and belief:

The statements of fact contained in this report are true and correct.

The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, unbiased professional analyses, opinions, and conclusions.

I have no present or prospective interest in the vessel that is the subject of this report, and I have no personal interest or bias with respect to the parties involved.

My compensation is not contingent upon the reporting of a predetermined value or direction in value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulate result, or the occurrence of a subsequent event.

I have made a personal inspection of the vessel that is the subject of this report.

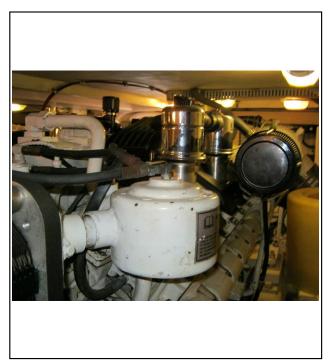
This report is submitted without prejudice and for the benefit of whom it may concern.

ATTENDING SURVEYOR:





Bertram 60' 006.JPG



Bertram 60' 007.JPG



Bertram 60' 009.JPG



Bertram 60' 010.JPG



Bertram 60' 012.JPG



Bertram 60' 013.JPG



Bertram 60' 014.JPG



Bertram 60' 019.JPG



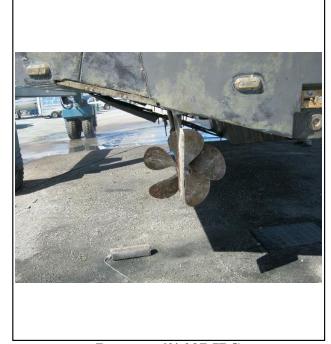
Bertram 60' 018.JPG



Bertram 60' 017.JPG



Bertram 60' 022.JPG



Bertram 60' 027.JPG



Bertram 60' 028.JPG



Bertram 60' 030.JPG



Bertram 60' 031.JPG



Bertram 60' 032.JPG



Bertram 60' 033.JPG



Bertram 60' 034.JPG



Bertram 60' 035.JPG



Bertram 60' 036.JPG



Bertram 60' 037.JPG



Bertram 60' 038.JPG



Bertram 60' 039.JPG



Bertram 60' 040.JPG



Bertram 60' 041.JPG



Bertram 60' 042.JPG



Bertram 60' 043.JPG



Bertram 60' 044.JPG



Bertram 60' 045.JPG



Bertram 60' 046.JPG



Bertram 60' 047.JPG



Bertram 60' 048.JPG



Bertram 60' 049.JPG



Bertram 60' 050.JPG



Bertram 60' 051.JPG



Bertram 60' 054.JPG



Bertram 60' 055.JPG