

OVERVIEW

40m OCEAN ROVER



True Explorer yachts are built for serious ocean cruising, their rugged styling a reflection of their capabilities: built for long range (thousands of miles each way) and also for endurance so that once you have reached your remote oasis you may remain there for 4-6 weeks without the need for a quick trip to the corner store. They are independent and self-sufficient personal islands.

Such is the case for this 40m Ice Class Explorer yacht. Onboard are all the comforts that you would expect in a world class yacht. The main section of the flybridge is covered by a hard top and can be heated or cooled as required for use in all hemispheres, and features a large dining area and bar. The master suite encompasses the entire aft half of the bridge deck allowing for stunning views along with a large private deck space. Extensive use of glass creates an atmosphere that provides for ongoing interactions with the surrounding environment. The main salon and dining area incorporate large feature windows which slide open to bring the outdoors in. Fold-down glass bulwarks create balconies to port and starboard over the water providing an uninterrupted view of exotic land and seascapes.

The main aft deck is a highly flexible platform that can accommodate a wide variety of support craft. There is room to comfortably fit a 32' (9.5M) primary tender, a 24' (7.3M) secondary tender, plus a number of small water craft – or instead the owner could select a submarine and smaller tenders. Along with all of these options, the deck also accommodates a helicopter landing pad. When all the water craft are deployed the boat deck is transformed into a huge beach area with easy water access.

The lower deck features four spacious guest cabins with extra-large port lights to provide enhanced natural light and viewing.

The OCEAN ROVER's mission profile demands that she has exceptional crew accommodations to handle the extended passage and remote area operations. For traditional cruising areas she can operate with a smaller crew. However, she can accommodate all of the additional crew members

necessary (and often not considered when creating a world exploration vessel) such as dive instructors, fishing guides, pilots, nannies, security personnel, etc.

The design team is dedicated to making all aspects of operation efficient and "GREEN" by incorporating proven procedures and utilizing and developing cutting edge technologies. To this end, the OCEAN ROVER will incorporate extensive solar cells, shaft generators, and the new TESLA battery power supply system, thus enabling reduction of the generator sizes and enhanced operation of the vessel in a wide variety of operating parameters. And of course our advance hull technology for fuel efficiency and seakeeping.

PRINCIPAL DIMENSIONS (approx.)

Length Overall	40.61m (133'-3")
Length Waterline	40.16M (131'-9")
Beam	9.14m (30'-0")
Draft	2.44m (8'-0")
Displacement (fully loaded)	335 M Tonnes (728,000 lbs.)
Gross Tonnage (estimated)	350 GT ITC

CONSTRUCTION

Hull Construction	Steel
Superstructure Construction	Aluminium

TANKAGE

Fuel Capacity	81,400 L (21,500 US gal.)
Fresh Water Capacity	11,350 L (3,000 US gal.)
Grey & Waste Water Capacity	1,600 L (425 US gal. each)
New & Used lube oil storage	454 L (120 US gal. each)

MACHINERY

Main Engines	2 x 985 HP Intermittent rating
Gensets (diesels)	1 x 35 kw, 2 x 65 kw
Watermakers (reverse osmosis)	2 x 1,200 US gal. per day

POWERING PREDICTIONS (estimated)

12 knots: 1 x 480 HP	fuel consumption 24 gal/hr	range = 11500 knt. miles
14 knots: 2 x 450 HP	fuel consumption 42 gal/hr	range = 7400 knt. miles
16 knots: 2 x 985 HP	fuel consumption 85 gal/hr	range = 4000 knt. Miles

Endurance 4,000 nautical miles at 12 knots with 30 days on station and 15% reserve



STABILITY (half loaded, intact, estimated)

Positive righting arm past 160 degrees, downflooding point past 60 degrees

MAIN ENGINES

2 x 985 hp intermittent rated Caterpillar diesels (C12.9) with underwater exhaust.

SHAFTS AND PROPS

2 x standard shafted 4 blade high performance props.

FUEL MANAGEMENT

A Racor filter and fuel management system shall be installed.

WATERTIGHT BULKHEADS

4 watertight bulkheads make for 5 watertight compartments.

SEACHEST SYSTEM

2 large Seachests with removable tops fitted above the waterline that may be opened when afloat to remove obstructions.

WASTE MANAGEMENT

A waste treatment plant shall be installed to latest regulations.

FIXED/ACTIVE STABILIZERS

Bray Yacht Design ice protected, fixed/active stabilization system shall be installed utilizing a Quantum Marine standard hydraulic system. Zero speed stabilization shall be optional.

BOW THRUSTERS

Hydraulic thruster to be fitted in the bow.

BOW ANCHOR WINDLASS

2 x Maxwell 8000 hydraulic windlasses with power up and down switches

DINGHY DAVIT

Davit system capable of 1800 kg (4,000 lbs.) lift at 6m (20') reach shall be fitted.

TRANSOM

Shall be fitted with a passarelle installed to extend 6 ft. past the edge of the swim platform.

DIVE SYSTEM

Storage for dive tanks shall be placed in the lazarette along with a dive tank compressor.

HARDTOP

Fixed hardtop with louvers and a radar arch style mast.

GENSET

Northern Lights diesel gensets; 2 x 65 kw and a 35 kw diesel night generator with sound shield

AIR CONDITIONING

14 zone air-conditioning system fitted with chill chasers. 9 air changes per hour for all areas.

PRESSURE WATER SYSTEM

Providing 40 – 60 p.s.i. continuous pressure.

BATTERY BANKS

Arranged into systems of priority. One system for starting the main engines, one for the gensets, and one system for house power. 51.5 sq, m (555 sq. ft.) of solar cells provide sufficient power to manage the daytime electrical requirements. A Telsa power wall shall be installed

TANKS

All tanks are integral with manholes covers mounted under the lower sole. Grey and black water tanks to be lined with corrosion resistant resin.

EXTERIOR

House and hull to be faired above the waterline and painted.

INTERIOR

A quality yacht interior shall be fitted with light tones and simple lines. Interior cabinetry shall be a light wood (White Ash) with no fancy graining or painted surfaces. Not minimalist, but light, contemporary and simple but classy. Marble or natural stone in guest bathrooms. Carpet in guest and owner's staterooms. Hard wearing flooring throughout. Loose furniture to be placed in the main salon and sky lounge.



CONSTRUCTION

The entire hull is designed with transverse frames spaced at 1.067m (42") centers with longitudinals sprung into place at 0.46m (18") centers.

Maximum sound levels shall not exceed the following levels (dB A weighted) at 12 knots cruise speed:

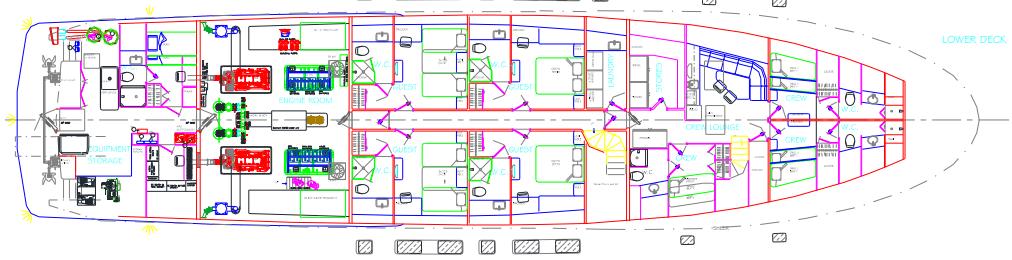
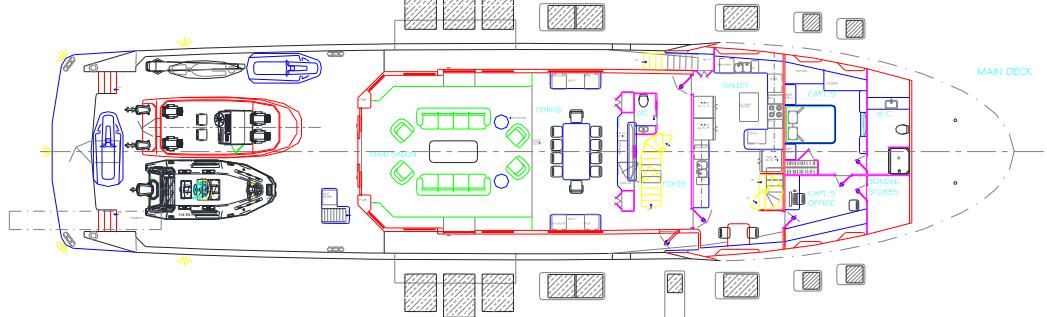
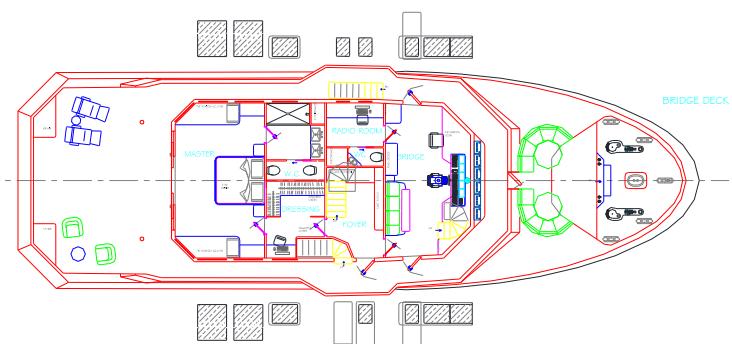
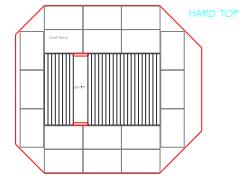
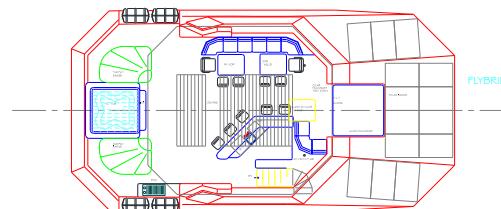
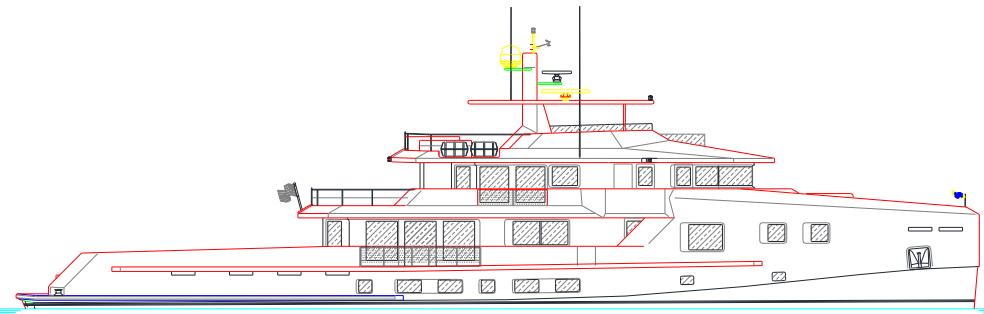
Owner's Accommodation -	55
Guest Accommodation -	60
Public rooms -	60
Recreational decks -	65
Crew cabins -	60
Crew day room -	65
Bridge -	65

Very good sound absorbent underlay shall be used to reduce sound transmission.

ELECTRONICS / NAVIGATION

2 radars, 2 sonars, Furuno 3D package, 5 display bridge.

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ATTACHED DRAWINGS
AII 400 EXPLODED
"OCEAN ROVER"
LON: 132° 3' E DEPTH: 30'-0"
LAT: 13° 19' S DRAFT: 8'-0"
SCALE: 1/4" = 10'

BRAY
YACHT DESIGN
AND PRESENTATION

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