

NAVAL ARCHITECTS - PROJECT MANAGERS - SURVEYORS



BASTIEN POUTHIER

B.Eng. (Hons.) Naval Architect, Marine Surveyor & Project Manager

Engineering Degree 20 Yrs post-graduate Experience

Managing Director of Associated Marine Design



NAVAL ARCHITECTS - PROJECT MANAGERS - SURVEYORS

BACKGROUND

Born in France in 1975, Bastien Pouthier was educated in France and in the U.K. A passion for sailing vessels and the sea led to an engineering degree in Yacht and Powercraft Design based in Southampton, England.

His initial experience was obtained whilst working as a Naval Architect, in various well-recognized Design Offices in France and in a large luxury sailing catamaran boatyard in Trinidad.

As a cofounder and now Managing Director of AMD, he then gained large experience in Marine Surveying, conducting over 800 surveys, as well as Naval Architecture working on AMD's own designs and Project Management experience on yacht refits and general maintenance.

He believes that future growth is only gained by providing a quality professional service.

LANGUAGE

Speaks fluent French and English, Spanish written and spoken, Portuguese spoken.

QUALIFICATIONS

Bachelor of Engineering in Yacht & Powercraft Design from Southampton Institute, Southampton, UK Honours Degree – 1996-1999

Scientific preparation in an Aerospacial and Land vehicles - engineering school, ESTACA in Levallois-Perret, France. – 1994-1996

Federal Sailing Instructor recognized by the FFV, French Federation Sailing Association – 1992

French powerboat pilot license, for unlimited power and coastal (not Professionally endorsed). #1994051107, August 16th 1994

R.Y.A. Off-Shore Yachtmaster, UK. #16680, May 08th 1998 Insurance recognized yacht skipper, gross tonnage < 200 tonnes (not Professionally endorsed)



NAVAL ARCHITECTS - PROJECT MANAGERS - SURVEYORS

SOFTWARE

- 2D & 3D Drafting
- 3D Modeling
- Stability, Hydrostatics
- Spreadsheet, Word processing

AutoCAD 12 to 2010 Rhino 5.0, MaxSurf Proteus, Hydromax Microsoft Office, Libre Office

MARINE SURVEY – 2001 to PRESENT

- Condition / Valuation surveys Reports in French & English for insurance companies, banks or private yachts, fishing vessels, tugs, cargo vessels and barges.
- Pre Purchase surveys Reports in French & English for vessel's potential buyer including condition/valuation, recommendations and estimated repairs cost.
- Damage surveys due to impact or poor design / construction Reports in French & English including recommendations on repair methods.
- Sea Trials.
- Tonnage surveys for Transport Canada (measurement and tonnage calculation, traditional method & simplified method) & St Vincent Registry.



NAVAL ARCHITECTS - PROJECT MANAGERS - SURVEYORS

MARINE DESIGN - 1997 to PRESENT

- Design of a User's Manual for the sailing catamaran Kennex 380, lesod at Chantier Naval de Cordouan, FR.
- Interior design of the refit of a Jeanneau SunFast 50, at Chantier Naval de Cordouan, FR.
- Design of a lifting keel device for the sailing yacht RM 10.50m, at Marc Lombard Architecture Navale, FR.

Structural Study - Requirements were to design a bulb keel able to lift to reduce draft (easier access to shallow areas) and to rest the vessel on its keel and rudders (beaching).

Design of the keel box – Requirements were that the structure resists grounding at average sailing speed (8 kts). Structural and general arrangement drawings.

- Design of chain plates for the sailing yacht Randonneur 12.00 m, at Marc Lombard Architecture Navale, FR.
- Preliminary design of a Patrol boat. In charge of the structural design, to the requirements of Lloyd's Register Regulations.
- Design of a bow sprit arrangement.
- Design of a 12.00 m Off-Shore Sailing Cruiser Racer. Design to an existing Open 40 Rule.
 Structure to ABS Rules, Tank testing of the lifting keel, bulb, rudders, complete calculations and drawings.
- Design and installation of a customized anchor roller.
- Design and installation of a stern deck arch for solar panel and antennas support.



NAVAL ARCHITECTS - PROJECT MANAGERS - SURVEYORS

- Design of a bulbous bow for a 110 ft steel trawler used for charter. Initial aim was to reduce pitching moments as the vessel was getting uncomfortable in heavy seas. Bow section was chosen to be an inverted tear drop shape with cambered panels. Side expected improvement: higher top speed, reduced fuel consumption. Included construction drawings and structural calculations as well as attachment to hull requirements.
- Design of a manual system for a forward dodger window on a 22 meters Sailing Yacht. Original electrical system was found non operational, so owner required a simple efficient manual system. Provided concept design and installation.
- Design of skegs for a 43' sailing catamaran to eradicate luffing moments. The vessel had a natural tendancy to turn into the wind under sail as well as motoring. The underwater lateral area was modified to improve the balance against windage aloft.



NAVAL ARCHITECTS - PROJECT MANAGERS - SURVEYORS

NAVAL ARCHITECTURE – 2000 to PRESENT

Preliminary design on the Refit of Highest-Honour III, a large luxury sailing catamaran to an American owner's requirements, at VPLP Architecture Navale, FR.

Position as a Naval Architect at HH Group Trinidad Ltd on construction of the above mentioned catamaran.

This included various aspects of Naval Architecture and Marine Engineering:

- Work on the accommodation general arrangement.
- Moulds design for the refit of the vessel, comprising a stern plug, a stern hull mould, a stern deck mould, a roof mould.
- Work on the sail plans, deck plans, hardware and fittings selection, comparison between various hardware manufacturers.
- Study on the Engineering of the Systems on board, including hydraulics, electricity, fresh and hot water, black and gray water, air conditioning, fresh air circulation, fuel, fire and bilge, engine room design. Provided schematics and lay-out drawings.
- Design of fiberglass, sandwich construction, hatches for deck storing compartments.
- Design of flush carbon deck hatches.
- Design of integral fresh water tanks in sandwich foam-fiberglass construction.
- Hydrodynamic optimization of the keels profile using a NACA profile.
- Design of an 18 ft power cat as a tender for luxury yachts, required to sail 30 kts with 8 persons on board.
- Design of a trailer to haul out dinghies for customers storing vessels in the yard.
- Design of various office furniture.

Bastien has worked on a number of vessels for concepts, designs and preliminary designs to evaluate the feasibility of a given project.

Preliminary design of 7 vessels of different layout, aesthetics and powering for a dive power catamaran for La Source Hotel, Grenada.

AMD presented the 7 projects in order to educate the Hotel management and assist them on establishing a design brief. A design brief was decided on after this meeting but the Hotel was later destroyed by Hurricane Ivan and the project was abandoned.



NAVAL ARCHITECTS - PROJECT MANAGERS - SURVEYORS

Preliminary design of a 30' power catamaran as tender and lifeboat for Windjammer cruises. The aim was to ascertain and estimate the cost of manufacturing such boats for the Windjammer fleet and for future export.

Numerous presentation drawings (General Arrangement and Powering studies for local boat builders bidding on Government projects such as Coast Guards, Customs and for private projects such as Tours and fishing vessels.

Modeling of extensions and hull modifications for private luxury vessels. Private superyacht owners needed graphic representation of what their vessel would look like after extensions, and work on layout with interior designers, work on aesthetics for superstructure alterations.

Drafting of a number of Fire and Safety Plans to SOLAS and IMO standards for tugs, crew boat and large charter vessels.

Complete design of a 60' aluminium power catamaran for a private client.

Design of a 32' launch for a private client. The vessel was built of cold moulded Mahoganny and Epoxy with a varnished finish. <u>www.roypeake.com</u> & <u>http://picasaweb.google.com/amdsurveys</u>

Detailed design of a 40' Ocean performance cruiser sailboat. Design in plywood and Epoxy to CE standards, never built.

Detailed design of a 52' Off-shore power catamaran for multiple application. The first design is aimed at a company in need of a cargo platform. The platform can be modified to an exclusive restaurant, day charter, dive and whale watching, office/workshop, private vessel with large accommodation. Design of the prototype in plywood and sandwich composite structure, never built.

Preliminary design of a 38' Off-shore power catamaran for launch application. Able to carry 12 passengers or 10 drums of oil to anchored ships in the Gulf of Paria, Trinidad at a speed of 28 knots loaded. Construction in foam sandwich composite.



NAVAL ARCHITECTS - PROJECT MANAGERS - SURVEYORS

PROJECT MANAGEMENT – 2001 to PRESENT

Bastien conducted many repairs and refits on cruising sailing yachts. This involved creating a work breakdown structure according to the scope of works, estimating costs of materials and labor, selecting laborers and contractors, direct work sequence and repair methods, organize materials selection, follow on work progress, and send updates to owners.

Refits included many aspects of boat repairs and maintenance:

- Fiberglass and major structural repairs Polyester & Epoxy:
 - On a rudder post and skeg structure delaminating on a production yacht – modification of the whole stern structure
 - On a lifting daggerboard following grounding
- Aluminum structure repair following vessel grounding. Consisted in pulling plates back in shape, replacement of buckled frames, dismantling and replacement of accommodation and plumbing in the area, fairing and painting.
- Painting and gelcoat renovation, interior varnishing. Gelcoat repairs included building moulds to keep non slippery pattern uniformity on production yachts.
- Repairs on Stainless steel tanks and fresh water systems (locating leaks, repairing, installing pumps and accumulator tanks).
- Upholstery and canvas replacement.
- Teak deck replacement using both Teak and Marinedeck materials.
- Engine and generator mechanical repairs.
- Windlass installations including structural modifications.
- Rigging modification and replacement.
- New electrical installations and general electrical maintenance.
- Refurbishing a 53' 1968 Gallant, Van De Stadt design. The project included and not limited to underwater hull stripped to bare fiberglass and Epoxy anti osmosis treatment, topsides and deck painting, teak deck laying, engine



NAVAL ARCHITECTS - PROJECT MANAGERS - SURVEYORS

compartment modification to fit a larger 110 Hp diesel engine, and various other jobs on the rig, sails and awnings, steering, bilge systems.

- Continuous superintendency of a luxury CT 54 cutter rigged ketch. AMD has managed S/Y Wind Eagle between 2003 and 2011, including complete maintenance and charters (skipper only and crewed). Up-keeping the vessel for the owner and skippering the yacht for the owner or commercial charters.
- Complete refit of a 1993 42' performance sailing monohull. The hull was built in cold moulded Cedar and Mahogany wood and Epoxy resin, the deck in plywood and Oregon pine.
 - The vessel was entirely stripped to bare wood inside. Transverse framing was modified for new systems laying, re-coated in Epoxy resin and the deck frames re-painted.
 - The lifting keel box was rebuilt and the keel strengthened and re-faired to re-establish the lifting ability.
 - The bulb was taken apart, re-faired and bolted using new fasteners.
 - The plywood and Oregon Pine deck was removed and replaced using plywood, bi-axial fiberglass and paint.
 - New deck layout and fittings was designed and fitted.
 - New electrical design and installation.
 - New water tanks were made integral to the hull, potable water coated, new plumbing was fitted.
 - The head / shower was re-designed and newly built and fitted.
 - The diesel engine and tankage were removed and re-fitted. Repairs were carried out to some water damage parts and framing.
 - New sail design and built. Rigging, mast and mast step were refitted in detailed and adjusted for improved sailing balance.

The vessel was completed in May 2013 and sailed her "maiden" voyage from Trinidad to St Maarten (Approx. 450 N.m) and across the Ocean to France, via Bermuda. She remained in France available for charter and used for coaching and cruising events until January 2016. She returned to Trinidad via the Canaries and Cape Verde where Bastien partially renewed her in preparation to her return to France via New York carried out in May 2019. The lack of damage and incidents during these ocean crossings suggests a professional and thorough preparation.



NAVAL ARCHITECTS - PROJECT MANAGERS - SURVEYORS

SAILING YACHT RACING - 2007 TO PRESENT

Bastien has been involved in the Caribbean Sailing Association rating rule for sailboat racing since 2007. First involved as a measurer, Bastien was asked to give some technical input to study how Yacht Design principles could be integrated into the current rule formula. Bastien evolved through this process as the Chief Technical Officer of the rule in 2015 and Chief Measurer in 2017. A new interface online program and edits to the background formulas were his largest tasks, communication with competitors and study of new yachts designs and features are imperative.

Bastien has been involved in a number of International Regattas as Technical Committee: Grenada Sailing Week, St Maarten Heineken Regatta, Les Voiles de St Barth, Antigua Sailing Week.

Bastien also races actively and can fit in a number of positions: helmsman of a Melges 24 and Soverel 30, foredeck and mast man on J24, main trimmer on C&C 36, pit on Refelx 38, "rail meat" on Kernan 47. Strategy and navigation are some of his attributes.

Bastien has extended his expertise of yacht design / yacht maintenance to the preparation of racing yachts. Currently refitting a 1999 off-shore racer to a modern inshore racer for the third season in a row, including but not limited to hull fairing and spraying antifouling paint, fitting chamfered thru hull fittings instead of mushrooms fittings, new deck non skid paint, fitting new deck equipment, clearing cluttered deck and interior, renovating electrical and plumbing systems, renovating steering gear, improving rudder trunk design to stop water ingress, setting up electronics and autopilot. This yacht won the traveler's award of the Caribbean Sailing Association for best results through out season before last and runner up last season.