



# **PERSONAL DETAILS & QUALIFICATIONS**

Name: Robby Boyd
Position: Design Engineer

Nationality: British

**Education:** BEng (Hons) Yacht and Powercraft Design

### **EMPLOYMENT RECORD**

2021 - PresentArgo Engineering Solutions Ltd, Naval Architect2021 - 2022Ben Rogerson Yacht Design, Design Engineer

## RÉSUMÉ

I am currently a Design Engineer at Argo Engineering having graduated from Solent University.

Throughout my degree, I completed modules covering a range of Naval Architecture disciplines including Hydrostatics, Stability, performance Prediction, Computed Aided Engineering, Marine Systems, Structural Analysis and Structural Design for Production.

My final year project focused on the composite design of a 45ft racing yacht design specifically for the new Fastnet course finishing in Cherbourg. This yacht was designed to ISO-12215 also meeting stability and seagoing criteria given by this standard as well as world sailing. Further work was completed on the performance of the yacht comparing it to currently built designs utilizing velocity prediction and routing software. I also worked within a group designing a 20m aluminum crew transfer vessel where I was primarily working on the structural design and weights analysis throughout the project.

I have spent summers through university working on racing yachts, gaining experience in composite design and manufacture and in the real world working with many different builders and designers.

### **EXPERIENCE**

## Wind Assisted Ship Propulsion - Smart Green Shipping (FastRig)

I have worked on the FastRig project primarily design, modelling and drafting as well as more detailed engineering of elements of the wing such as camber arm actuation. Furthermore, I have undertaken development of the FEA model and subsequent FEA analysis of the wing section.

## 12m Composite RIB Preliminary Design

At Argo I have also worked on the preliminary design of a 12m composite RIB. Initially I adapted an existing 3D model to meet new requirements resulting in drafting the preliminary arrangements and engineering drawings for the project.

## 43m & 56m Ferry

I have developed structures for 43m and 56m aluminum ferries, using DNV and Bureau Veritas rules. Through these two projects I have developed weights models and detailed weights analysis of the vessels.

## **Finite Element Analysis**

Since starting at Argo, I have worked on FEA projects and have gained experience using Strand7.

### **Hull Structural Analysis**

I have analysed hull structures using hand calculations for a range of standards including ISO, Lloyds, Bureau Veritas and DNV. This has given me the opportunity to use the relevant software such as HullScant, Lloyds SSC and Starboat. This work has been on a range of monohulls and catamarans in composite and aluminum.

### **Naval Architecture**

I have been part of projects requiring damage stability assessments using Orca3D.

# **Professional Development**

Associate Member of The Royal Institution of Naval Architects (AMRINA)

### **OUT OF WORK INTERESTS**

My main interests outside of work are sailing, climbing and cycling. I raced in the Laser class as a youth at European and world level. I now compete on yachts both in the Solent and further afield as well as match racing. I also enjoy offshore sailing events in the UK and abroad. I boulder and sport climb both indoors and outdoors.