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## **Case Study - Callum Ransley – Gosport Ferry (funded 2015-16)**

### **Gospory Ferry**

**[www.gosportferry.co.uk](http://www.gosportferry.co.uk)**

In the last 6 months I have carried on with a range of subjects at the BAE training centre including: CAD/CAM, Electrical and Electronic Principles, Engineering maintenance, Mechanical engineering and fitting and turning. These all contribute, along with many other subjects, to my BTEC Level 3 Marine engineering course. Most of the first year is theory and written work but this means I get to study the subjects and understand how things work before actually jumping in at the deep end with the practical side of things.

I have now completed my first year at the training centre and am waiting on the results of my Level 3 marine engineering BTEC. I can now start my NVQ Level 3 and use all the knowledge I have gained over the past year and put it to work on the Gosport ferry boats. An NVQ is a lot more practical based which means I can now use the knowledge I have learned over the past year to gain skills and experience working on the Gosport ferries.

I am predominantly electrical which means I can work on board the boat electrics which includes 3 phase, single phase and battery electrics, workshop (industrial) electrics, house electrics in the offices and outside electrics in the yard and pontoons. I feel this will give me a wide range of experience in the electrical field and open my career pathway into the electrical and boating world. I am working under the supervision of Steve Leng, an ex-Royal Navy electrical marine engineering artificer, he will be guiding me through the next three years of my apprenticeship while at Gosport ferry. We have 4 boats to work from, ranging from our 50 year old Gosport queen to our 1 year old Harbour Spirit. This means I get to work on and learn old marine systems like the old gardner diesel engines on the queen as

As well as the new systems on Harbour Spirit like ray marine radars, brand new SCANIA engines and progressive LED lighting. Every year all four of our boats are lifted out of the water at the start of their re-fit, during re-fit the boats hull is jet washed down and re-galvanised at Porchester dry docks, once this has been completed the Gosport Ferry engineers will service all the engines, clean the whole boat and me and Steve Leng will be carrying on converting all the boats lighting to LED. LED lighting is a lot more of a cleaner and natural lighting which will make the boats look newer and more pleasing to the eye. As well as this, LEDs are a lot more energy efficient meaning lower running costs and they have a much longer life time than normal lighting. Every year at re-fit we will be altering the boats to make them more efficient and cheaper to run as well as making it more pleasant to the eye and better for the passengers in general.

At Clarence Marine Engineering there will be a big change in the safety aspect of the electrics around the workshop and yard. I will play a big part in the revamp of the electrics around the yard and workshop, for example all the shore supply pillars that supply our boats when they are docking are going to be changed for up to date, modern 430V shore supply boxes. We will also be changing a lot of the original consumer units that are currently in our workshop now with new RCD and breaker protected units. This will increase the safety of all members of staff in the workshop as these feed all the power to their benches.

Being a small company I will also get the chance to work on the mechanical side of things as well as the general maintenance of the vessels. So like my first year I will be carrying out and reporting on jobs that I do. For example, we have just finished converting all of Portsea's pontoon and brow lighting to LED. So now I will have to write up a report on how I did this, what tools I used and what techniques were used. I will also upload before and after photographs of the pontoon and brow to show the improvement to the lighting but also pictures of me doing the work to show that I did it. I will have to do this for all the jobs I do throughout the year to make sure I achieve my NVQ level 3.



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