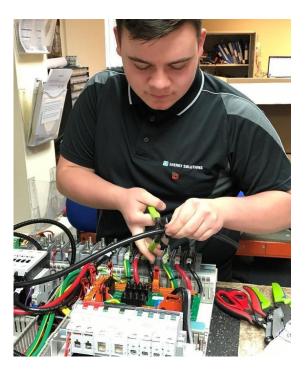


## Case Study – Chris Hyland – Marine Engineer (funded 2016-17)

**Energy Solutions** 

www.energy-solutions.co.uk



## Introduction

Marine is Energy Solutions' longest established market area, since 1996 we have been working with leading OEM boat builders, superyacht owners, boat yards and individual sailing and motor

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yachts. As well as helping clients find power and control systems that fit their requirements we continually strive to introduce new, innovative products to our customers. We research, design and manufacture in house and provide new ways for our clients to attract customers and set themselves apart in terms of look, efficiency and technology. Working with products from the world's leading manufacturers we are able to offer clients fully designed systems incorporating all elements form helm panels to tank senders."

Energy Solutions have received support from the SA Scheme to employ their first two apprentices including financial support with a grant and a loan to help with the initial investment in skills by paying the apprentices wages during the first year of training and employment. The feedback has been great, Paul Holland the MD and founder of Energy Solutions has said that "the support from the Shipwrights has been invaluable and helped us to commit to training now and for the future". As a result Energy Solutions have been able to send their two apprentices, Chris and Taylor, to the annual BMEEA (British Marine Electrical & Electronics Association) Conference and apprentice competition as describe by the pair below. Paul Holland has also stated that they are looking at their options for continuing apprenticeship training."

Dear Worshipful Company of Shipwrights,

Once again I am writing to you to update you on my apprenticeship and how my training is going and how the funding we are receiving is really helping me in my studies of the inner workings of marine electrics.

Since my last update, I have greatly improved my understanding of the inner workings of all of the marine panels, boxes and systems that I have been building. I have been on more site visits and have also recently been involved in a couple of events held by the BMEEA.

I went to help out commissioning a boat for AMC. Some of the panels on this particular boat I had built and seen tested in the workshop beforehand, so it was great to see them fully installed on the boat, and to see how the power is distributed and fed around the boat was also very useful for me. This commission visit was also very useful because it showed me how to test and inspect the systems on the boats to make sure that they are working correctly and are installed as intended.

Recently I went to a competition from the BMEEA for apprentices. Other companies there included: RNLI and Sunseeker. The challenge set was to design and complete a circuit which was supposed to control a winch going up and down. In addition to this we also had to do a volt drop calculation using the information we were provided with of the parts that we were using. This challenge was a really good test of how much we have all learnt in our time as apprentices and how much more we still have to learn. We unfortunately didn't completely finish the challenge, although we did get the general control side of things correct. We were

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very close to the final solution and the competition was very fun and also a good tester of how much we've learnt.

I have also been on the British Marine Electrical Technician course to become a BMEEAcertified marine electrical technician. This course showed me how far I have actually come since the start of my apprenticeship. I realised that I have actually learnt a lot more that I had thought at first. The course itself was really well put together and run which made it very interesting and also definitely worth it. The course also taught me more about the regulations of the marine industry and why certain things are the way that they are. It also reaffirmed my previous knowledge from college and also expanded a little more, going even further into detail about certain topics.

I hope this update is useful for you to see how the funding is really helping me to have a more rounded knowledge of things as well as being able to build them. Hopefully this can continue in the suture and help me to have an even greater understanding of processes such as designing and testing marine systems.

