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Shipwrights

Case Study - Edel McCarthy – Boatbuilder apprentice (funded 2019-20)

Scottish Maritime Museum, Irvine

<https://www.scottishmaritimemuseum.org>



Edel joined the Scottish Maritime Museum in the Spring of 2019. After trying several different jobs, she came to the Museum and impressed with her enthusiasm and potential right from the start. Soon after her trial period she was signed up for the apprenticeship, despite having no previous experience in Boat building. We had a chat with Edel at the end of her first year about her experience and progress so far...

Making her mark...

“Before I started at the Museum, I never had an interest in boats or at least I never thought I did have an interest until I started to work with the Scottish Maritime Museum Boat Building School. I am very grateful I’ve had this chance as I know there will be people out there that would love to do this but don’t have the resources or know how to go about trying to get into the industry or just simply can’t because it is becoming rare now. I never ever pictured myself in this type of work and now I can’t imagine me working anywhere else that isn’t relevant to Boat Building.”

Skills and Knowledge...

One of the big project I have been working is the construction of a St Ayles skiff and I have been given more responsibility as my colleague and I are tasked with completing this build.

We started a few months back and have now built the main hull. I am now at the stage of fitting and installing the gunnels and inwales which are almost complete and then can move on to installing seats etc. We decided to change the gunnels and inwales and add a capping piece. I have never done it this way before when building the skiffs, so it is a pleasant change to see how you can fit these in diverse ways to change the looks and make it more appealing.



It's a bit hard to tell in this picture, but you can slightly make out that the inwales have been raised higher than the plywood hull, and there will be a capping piece fitted in between the inwales and gunnels which will cover the plywood. I am excited to see how it looks in the end because it will be different from what I have done, and I look forward to completing it.

I have also had the opportunity to repair some planks on William Fifes Vagrant. I had forgotten to take pictures of the process, but I have a picture of some of the planks after installation.



The planks with the washers that had been temporarily screwed while gluing up in the picture were the planks I made and installed. It was a broad experience doing this as it was my first time making a stepped scarph joint (I practiced this joint on scrap wood a couple of times until I was confident and happy enough that I could do a clean scarph).

Before I done this, I had to release some of the plank to be able to fit the replacement and to scarph the plank that is still attached to the boat. So, I took it back to the frame where there were roves still intact, I cut these off with a multi-cutter by slotting it behind the frame and cutting through the copper roves. This process released the plank from the boat enough for me to wedge it away from the frame.

I then marked out how long the scarph had to be on the face side, marked out on the edge side by placing a ruler from one corner to another that made a diagonal line connecting the two but as it was a stepped scarph, I did not take my line right up to the corners so that when the two planks are cut and joined, they create a lip or a notch that butt together. This also gives extra strength on the joint as they are not able to easily slip away or open from each other over time as maybe a normal scarph joint could potentially do.

Once I had marked up the plank on the boat, I then made vertical cuts on the face of the wood using the multi-cutter as deep as my diagonal line on the top face of the timber for guidance. After I done this, I then chiselled the excess wood off and then planed to make it smooth and take it to my marked lines.

When I was confident with my practice runs, I then marked out and sawed my scarph joint on the timber being used for the repair, cleaning them up with a plane and a chisel after they

had been cut. They had already been roughly cut to the right dimensions they were just slightly oversized to make room for any adjustments if needed once I came to fit them. When I was confident that both the scarph joints connected properly, I then glued and clamped them and temporarily screwed where there will be new roves fitted.

Early on in the apprenticeship I struggled a little bit reading out construction plans, but I have had the chance to build a display stand for a Bolt 18 (most powerful electric boat for its size in the UK) which was a good experience doing this and coming to grips with converting measurements from a piece of paper and seeing it come to life on the plywood I was making it on. Here is some pictures of the plans and the stand.



Edel McCarthy – Scottish Maritime Museum

I really enjoyed doing this and seeing the result. Even though I know this isn't quite the same as construction plans for a boat it is a good way to start introducing myself to understanding how to read plans. I look forward to doing more things like this as I know it will benefit me long term.

My Knowledge and skills have come a long way over the course of the year. Every day in work is a school day there is always something new to learn or learning how to do things in different ways/methods etc and I think this is a great benefit of the job because it's always exciting.

It does come with its challenges like any other job, but I think it's particularly rewarding in this type of job when challenges do arise and I do overcome them. It makes me proud of what I am capable of. Even if it gets a little frustrating when I can't get my work done the way I would ideally like it, it makes me practice more until I get it right and I am happy with what I have produced!

And what about the future?

I have had such a great time and I am looking forward to see what the future brings doing this apprenticeship. As I am now doing more of my apprenticeship course work, I've got more responsibility and I feel more part of the team rather than just being in a job, because I know I need to learn and it has made me become more confident in myself and in the work I construct and produce. I look forward to completing my apprenticeship and maybe I will have many more opportunities once I am fully qualified.

I have considered the teaching side of boat building and I have thought I would possibly like to teach people as it is a dying art and it probably won't be around for much longer if more people don't learn these skills. So I think it would be only right for me to pass on the knowledge and skills I have learned from boat builders eventually in many years' time down the line to try help keep it alive."



Ediel McCarthy featured in the business pages of the Daily Telegraph – July 2019