Spotlight on…
Lt Penny Thackray
Education and Training Officer

What will be the key challenges in your role?
The key challenges include ensuring that personnel take the opportunity for personal development during this busy period. It will also be ensuring that all the relevant training that needs to take place in preparation for taking the ship to sea happens before we set sail.

What do you enjoy most about your role?
I enjoy providing the Ship’s Company with education and training opportunities.

Finally, what do you do in your spare time?
I have a pet hamster called Sandy to keep me company when I work away from family. I enjoy playing sport and hope to take up Karate again now I am in a shore-side role.

How did your career bring you to where you are today, currently working with the Aircraft Carrier Alliance?
My previous role was providing education to the submarine flotilla (as a fully qualified submariner) and this was a natural progression to build on my education experience and add the training role to my skill set.

When did you start working on the QEC programme and what is your current role?
I joined 14 June 2016 as the Education and Training Officer.

What does that involve?
This is the provision of education opportunities to personnel from GCSEs to access and degrees. It also involves running the training plot to be ready to take the Ship on completion of build.
Managing Director's Update

Since my last update we’ve had two very important visits to the Carriers – HRH Prince Charles, or the Duke of Rothsay as he is known when visiting Scotland, and two F-35B Lightning II jets.

The arrival of our royal visitor caused quite a buzz in the yard amongst our workforce to say the least!

During his visit, we gave HRH Prince Charles a quick update on the QE Class programme before taking him on a tour of HMS Prince Wales, the part he was really looking forward to! We took His Highness around the main areas of the ship including the Hangar, Ships Control Centre, Operations Room, Bridge and the Flight Deck. It was great to see that he took every opportunity to talk to members of the workforce who were lined up along the route in the hope that they would meet him. The Prince then did us the honour of signaling for the Goliath crane to lower Sponson 11 into place – a truly historic moment for the programme. This was the final section of the 280-metre-long warship to be manufactured and includes part of the flight deck.

Unfortunately, our second visitors weren’t able to stay quite as long! You may have caught a very quick glimpse of them if you were here in Rosyth on 1 July. It was an exhilarating experience to witness the F-35B Lightning jets fly over HMS Queen Elizabeth, what a noise and speed! The jets flew to the UK from America for the Royal International Air Tattoo and Farnborough Air show and conducted the first ever flypast over the Carriers during their visit. We took the opportunity to test our Mission Systems, and had HMS Queen Elizabeth track the jets using her Forward Identify Friend or Foe (IFF) and Long Range Radar, what a thrilling experience. As the teeth of the carrier’s strike force these are the first aircraft in aviation history to be supersonic, have radar-evading stealth characteristics and to operate as a Short Take off Vertical Landing.

In other news, there was an unusually bright blue sky in Rosyth when HMS Prince of Wales’ long range radar was successfully lifted into place last month. This powerful radar now tops off the forward island and is one of only a few pieces of Mission Systems equipment large enough to require the use of the massive Goliath crane.

What could be described as the invisible eyes of the ship, the long range radar can automatically detect and track up to 1,000 air targets at a range of around 250 nautical miles.

All block lifts are now complete on HMS Prince of Wales, with Sponsons 11 and 12, and the aft aircraft lift having been successfully moved into position and assembled. This paves the way for the team to move into the next phase of the programme which will be the commissioning and installation of equipment within the vessel.

Across the yard, HMS Queen Elizabeth moved another step closer to entering service when we successfully completed an important test as part of the power and propulsion integration trials and the masthead was pivoted forward for the first time. The mast, 56m above the keel, is designed to pivot forward in order for the ship to travel under bridges, such as the three Forth Estuary crossings. Home to antennae for communications systems, the mast is a pivotal part of navigation and flight safety. Finally, it wouldn’t be right if I didn’t mention the flight deck. Progress has been really impressive and HMS Queen Elizabeth now looks more and more like an aircraft carrier with the ramp fully painted and the first set of Visual Landing Aids lights fitted.

Remember you can keep up to date with the QE class programme through our social media channels. Follow us on twitter, and keep an eye out for new photography on Flickr as well as new time lapse footage on YouTube.
ACA Inspiring Women into Engineering

National Women in Engineering, a day dedicated to raising the profile and celebrating the achievements of women in engineering, was held on 23 June.

Thales celebrated National Women into Engineering Day by hosting a number of events throughout the UK.

In Scotland, Thales OME (Optronics and Missile Electronics) in Glasgow hosted a Women Into Engineering event and invited senior girls from local schools to come and meet female engineers within the group. The pupils were able to find out what inspired them to become engineers, what routes they had taken and the challenges they faced and high points along the way.

Thales OME had also set up a factory tour and a number of group sessions and activities.

The Aircraft Carrier Alliance was represented by Heather Mitchell, Mechanical Systems Lead Engineer and Sara-Jane Palmer, Propulsion & Manoeuvring Systems Lead Engineer both from Thales DMS. They travelled over from Rosyth to tell the girls about their roles within the ACA and what it is like to be involved in the design and build of the aircraft carriers.

Heather and Sara-Jane had a chat with the girls about how they have built their careers in engineering, their interests and their hobbies and how these have helped them get to where they are today. Using a scaled model of HMS Queen Elizabeth they explained how the ship’s power and propulsion system worked. Sara-Jane went on to spend time explaining in depth how she has contributed on the propulsion side, in particular the shaftline.

As part of encouraging young women to follow a career in engineering the team promoted the different environments engineers can work in, from offices to the ships. To give them a feel for what this is like Heather and Sara-Jane took along a selection of personal protective equipment (PPE) and had the girls ‘dressing up’ for a day’s work on the carrier.

This also gave Heather and Sara-Jane an opportunity to explain the different roles within the programme and how the correct PPE was important.

The feedback from the day was extremely positive with the comments below.

“IT was really engaging and I really enjoyed hearing other peoples experiences within Thales. It left me really inspired.”

“I found it really interesting and inspiring. Today definitely opened my eyes to different areas of engineering.”

Heather and Sara-Jane both enjoyed the day and hope they inspired even just a few girls to consider a career in engineering. They also extend a big thank you to Thales OME for hosting the day and inviting them to take part.

As one of the largest employers of engineers in the UK, BAE Systems is proud of the many female role models in the engineering community. To celebrate Women into Engineering BAE Systems held a special ‘women in engineering’ conference to bring many of them together.

The event featured debates on their response to gender diversity and a range of keynote speakers, including Katie Callan, Programme Management Director in Naval Ships. Katie shared her thoughts on being a woman in an engineering organisation and gave six top tips on diversity.

Katie said: “I was pleased at the mix of people at the event, and the fact that it wasn’t too focused on ‘women’. The learning was definitely around diversity and inclusion for everyone. I personally took away the need to ensure I’m working with people from across the spectrum (those that push my thinking and approach) and not just those that I feel most comfortable with. I also took away the fact that I need to try and understand my unconscious bias more - being aware of your internal reactions to situations and people is really important.”
F-35B Lightning II meets HMS Queen Elizabeth

Did you manage to catch a glimpse of the F-35B Lightning II jets as they flew past the aircraft carriers in Rosyth?

While the aircrafts flew to the UK for the Royal International Air Tattoo and Farnborough Airshow they paid the carriers a visit and conducted a quick succession flypast on 1 July.

Aviation history was made in the UK this summer when, in a major airshow 'first', the Lockheed Martin F-35 Lightning II, the Joint Strike Fighter, made its much-anticipated international display debut.

Visitors to the Air Tattoo at RAF Fairford were the first outside the US to see the stealthy, supersonic aircraft's state-of-the-art capabilities when it displayed on all three days of the airshow (July 8-10).

Defence Secretary Michael Fallon said: "The F-35s are the most advanced fast jets in the world. Whether operating from land or from one of our two new aircraft carriers - the UK's largest ever - they will ensure we have a cutting edge and formidable fighting force."

The Farnborough International Airshow (FIA) combines a five-day trade show with a two-day public air show that displays some of the world's premiere military and commercial aircraft.

This year, the F-35B impressed the thousands of people who showed up at FIA on a daily basis. It flew every day through the end of the show. The jet performed for 15 minutes capped off with its now famous hover performance where it hung in midair, tilted its wings to the crowd, and executed a 360-degree turn prior to ending its show.

At the same time, a full-scale model of the F-35 was on display for crowds to get a close-up view of the jet. FIA concluded the F-35Bs' formal appearances in the U.K. before BK-3 and two U.S. Marine Corps F-35Bs headed back to the United States.