

News

Assembly Completion



The final piece of the jigsaw for HMS Queen Elizabeth was lifted into place on Thursday 8 May. The Aft Aircraft Lift which completes the assembly phase for the first of class allows focus to continue on undocking activities ahead of July 2014. From the outset in June 2011 it has been a tremendous achievement by the Assembly team, Heavy handling, Dimensional control, Production services, Major Sub Contractors and Operations, who have achieved a number of major milestones which have been critical to the programme. From three assembly phases, two dockings, one double docking, two major skiddings and 52 Goliath Crane lifts, the team have worked incredibly hard to deliver these milestones on time.

Tom Niven, Head of Assembly said; "All involved in this phase of the ship build can take great pride in constructing the nations new flag ship. We continue now to move forward in preparation for the naming ceremony and undocking. When Queen Elizabeth is afloat we will all get a greater appreciation of the size and scale of the vessel we have constructed. These achievements are testament to the skills and determination of all of us and I sincerely thank everyone concerned for working with us to deliver the Assembly phase."

Our People

Our seventh people profile is now available to watch online [here](#). This week's profile features Jason Kennedy.



Spotlight on...

Programme Director Quarterly Update

We are now well into the second quarter of this year and as a team we have managed to achieve some great successes such as the war room on board Queen Elizabeth, the shaft and pole mast installation on Queen Elizabeth, along with a strong performance on block build. As you will previously have heard, the AIM programme was set up in order to successfully deliver our Nation's Flagships on time and within the agreed budget, improving the way we work so that we can reduce the blockers that stop us being able to get on with the job. Following on from the roadshow held in April, we now have all of the individuals in place who will head up our AIM programme. The contribution from across all employees on the programme has been fantastic to see with the energy, enthusiasm and drive from all involved being something I am extremely proud of. The work-stream leads are currently undergoing their training and I am personally looking forward to hearing about the implementation processes in the near future.

The focus in the coming months is rightly towards the Naming Ceremony and Flood Up of Queen Elizabeth and the key deliverables we must achieve in the run up to this momentous occasion. The real focuses are on; ensuring all compartments below the waterline are completed ahead of flood up, the completion of the shaft line and break blades, and to continue with the volume of painting both internally and externally on the Carrier.

Another big focus for the team both at Rosyth and the build yards is preparing for the arrival of Prince of Wales blocks at the end of the summer. A lot needs to be achieved in Rosyth to move Queen Elizabeth to J/K berth and ensure No. 1 dock is ready for the new arrival.

On the Aviation side of Systems Delivery, I visited Monitor Paints in the North East of England with Rear Admiral Brunton to see progress on the Flight Deck Coating thermal metal spray system which is leading edge new technology and will provide the flight deck protection through life against the significant heat generated by the F35 jets landing and taking off. The Aviation team continue to support the Flyco module installation and outfit on the aft island and the preparations for the aft Aircraft lift installation.

The Power & Propulsion team are working closely with the undocking team to progress the shaft line work and have recently delivered the latest release of information to the Test and Commissioning team for the Integrated Platform Management System (IPMS).

For Mission Systems the Mast Cap for Prince of Wales has been shipped from Rosyth to the integration facility in Hengelo Holland to allow de-risking integration activities with the Long Range Radar. On Queen Elizabeth they are driving installation of the Blown Fibre conduit on to the ship which is a key enabler for setting to work the ship systems.

Ian Booth
Programme Director, QEC

QE Class Pole Mast reaches new heights

With the help from the Goliath crane, the Upper Mast section has now been lifted in to position forming the highest point of the aircraft carrier. With the installation of the Pole Mast now complete, it now stands at an impressive 20 metres tall above the Aft Island. The achievement of this successful installation involved a multi-disciplined team formed by members across the ACA – some of which working at heights certainly not for the faint hearted.

Looking ahead, The team will next demonstrate the entire Pole Mast being lowered and raised by operating the Pole Mast's Hydraulic Sub-System.



HMS Queen Elizabeth Rosyth

Tanks

This week a SW Ballast Tank (8TC6) has been signed off following completion of its air test and will now be progressed towards CCI. Work has commenced to get the two chain lockers ready for a water tests which is planned for next week.

Shaft Programme

- The first set of rope guards that were removed from the dock bottom to the external paint cell have been fully coated, they will be delivered back to the vessel on Monday. The Orkot will be painted once the supplier confirms the existing paint coating is compatible with the specified finish coatings.
- The inspections by Lloyds and Quality Control to confirm the steelwork i.w.o. the deep sea seals are within tolerance is ongoing and is due to be completed this week. Internally the slinging team have managed to devise a safe method to transport the intermediate shafts into position between the prop motors utilising the existing lifting eyes. This has been signed off by the SHE team and the operation has commenced on the port shaft.

Hull Programme

- Painting of the topside areas has continued in damage control zone 1 and is overall 86% complete. Work has also commenced on sponson's 1, 2 3 and 4 with containment installation well underway and some areas now being washed and degreased.
- At the aft end of the vessel work has continued i.w.o. the external shaft area with the limpetite coating forecast to be completed on the aft A-frames and rudders this week. Also the paint team has begun to build up paint coatings on the boot-up in LB04 & LB05.

Damage Control Zone ½

- Week 19's Pre-CCI's inspected with minor defects
- Chain Lockers prepped for hydro test week 20.

Damage Control Zone 5

- 30 ITR 4's submitted to QC
- PO1 hotwork continues to plan with over 470 items fitted this week
- Large bore pipework now started in CB06
- Emergency Switchboard now repositioned back onto its seating
- Deck straightening now started on 3 deck
- Cbo6 catwalk now fitted which leaves SPN41 and catwalk over scheduled for mid-May.

HMS Prince of Wales

Merseyside

HMS Prince of Wales CB02:

- PO1 inspection completion for G ring 2 deck port unit compartments 2GW6, 2GX6, 2GB6 and 2GA6.
- 23 out of 31 compartments have now been PO1 inspected within G ring with a further four compartments due for PO1 inspection next week.
- Installation of hotwork seats and supports near completion with only four compartments remaining.
- Painting and insulation to all G ring compartments continues (paint complete to 19 compartments, insulation complete to nine compartments)
- Pipework and Hilti second fix equipment supports continues throughout G ring with cable containment and electrical platform equipment now also being fitted to all decks.
- Fitting of seats and pipe supports has now commenced within F ring 4 deck centre unit compartments.
- Salt water pipe support run is now being fitted within F ring 4 deck port unit compartments .
- All laundry lock out equipment placed in compartments and protected along with large seats this week in readiness for the lift and turn of 2 deck centre unit.
- F ring 2 deck centre unit was lifting, turned and placed on block this week (See below).
- First PO1 inspection to F ring is scheduled for completion week 20.



HMS Prince of Wales CB04:

- Manufacture of seats and supports has commenced for A ring 3 deck compartments.
- Preparations for structural dry surveys to A ring unit 2 continues.
- A ring units 3 and 4 deck plates being welded together continues along with units 5 and 6 barring out
- Plates on jig for B ring being marked out and welding continues.

Tyne

HMS Prince of Wales CB03:

- CB03 is now structurally complete and all rings are in their final position.
- 52 Compartment Handover Inspections have now been completed for the block with the process now into ring K. The defects are being worked on the and the paperwork processed
- Outfit continues in the ring LK and L, with the routed systems maturing in ring LK and the insulation being installed on ring L.
- Over 1000m of cable and duct have now been installed on the block as well as 1800 pipe spools; terminations approaching double what was achieved on Ship 01.
- The handover team were onsite this week to discuss progress and were pleased with progress of the block.

Portsmouth

HMS Prince of Wales CB02:

- All hotwork inspections and painting have been achieved on ring C.
- All pipework has been installed on ring A.
- Terminations Ahead of Programme across all rings.

HMS Prince of Wales LB02:

- CHOI plan is ahead of schedule with 121 now completed.
- Shell painting is progressing well on the portside and 4 deck.
- Recreation spaces on all rings are now well underway, with decks being screened and bulk head linings going up.
- Pipe audits progressing – 452 101s were achieved last week and 341 108s.
- Electrical terminations on-going with 37,675 cores terminated to date.
- Cable installation is nearing completion with less than 20km left to install.
- April milestone of 4860 pipes fitted on G ring has been achieved.

Govan

HMS Prince of Wales LB03:

- Alliance partners Ticon, Imtech, and Balfour Beatty are now working through opportunities afforded by the length of time remaining to block load out to progress scope they would otherwise not completed until the block reached the integration yard.
- SSSL are finalizing a large change involving the shot-blasting of the outer shell and will finish the final coat by the end of the week, after which, the production team will refit the sea tube valves and isolation kits. The full ECR is expected to be complete by the beginning of the week
- Both the port and starboard inserts are now in place, allowing paint and insulation work to continue inside the ship. This means that next week the final CHOI can take place and when signed-off, will bring CHOI completion to 100%. As a result of this work, the operations team have communicated that the access and egress points for the block have been largely reduced and have conducted a safety review altering all emergency exit signage accordingly.
- The watertight integrity programme is also progressing well, with the weather-tight bulkhead plates now installed on most of the aft face of the block and work continuing on the forward face. Balfour Beatty and BAE Systems are also continuing with the watertight sealing of glands and penetrations. Successfully completing this work is essential to the transportation process and continues to be a major activity leading up to block roll out on the 13 July 2014. Preparations will begin this week in advance of the block weigh in for transportation.

HMS Prince of Wales LB04:

- With the preparation area complete and the units moving into the fabrication area, the focus within this facility is now on the countdown of the final units, and looking to deliver the last unit in Week 1422 to achieve the next challenging milestone for LB04.
- This last unit delivery from the fabrication area supports the advancement of the 'link-up' start between rings N and P (and the block move of rings M/N). This move was advanced by four weeks in the plan to give the optimum opportunity and focus on system completion across the link-up.
- Last week has seen the further successful erect of two units with three dry surveys completed in LM15, LN47 and LP48.

- There are only nine units left to erect on LB04.
- Last week saw the first of the cabin accommodation areas within rings P and Q painted in preparation for the cabin deliveries in week 1422.
- Over the weekend the last compartments within this area have been painted which allows the installation of the HVAC and cables to commence to support the cabins being placed into position
- Currently within LB04 the pipe installation on the block is maintaining the excellent performance, being ahead of plan by almost 800 pipes. Electrical cable installation continues to perform ahead of the plan by over 16km which is advancing the electrical termination scope to be circa 8000 cores ahead.
- HVAC is also performing well and is currently 400m ahead of plan.