

ACA Weekly Communication

News

Structural Completion

This week saw the completion of the hull structure on HMS Queen Elizabeth. Tom Niven, Head of Assembly said, "I am delighted to report that we have achieved the structural design intent, Lloyds Register (LR) of shipping being the acceptance authorities and the ACA being the Structural Design Authorities (DDAs)." He went on to say "This has been achieved through an integrated team approach consisting of engineering, LR, production, transportation and heavy handling."

A note from the Programme Director

2013 has been a momentous and challenging year for the Aircraft Carrier Alliance and for all of us on the programme.



There has been some tremendous progress in the assembly of HMS Queen Elizabeth; we have moved from having just two blocks in the dry dock to having a structurally complete ship. This was only possible through the integrated working of the ACA where Industry Partners are working hand-in-hand with the Ministry of Defence.

We have faced many challenges this year with tough deadlines to meet alongside our re-baselining activities and I know you have all worked extremely hard to ensure the programme remained on track. I would like to thank every one of you for your continued hard work and commitment to the programme.

Next year will be another extremely important, and busy, year for us. Preparations for flood up will increase significantly in the first quarter, and work on HMS Prince of Wales will continue to ramp up with blocks starting to make their way to Rosyth in the second part of 2014. Before that happens I ask that you all go home and enjoy some well-earned time off with your families.

May I take the opportunity to wish you all a Merry Christmas.

All the best,
Ian Booth
Programme Director



L-R Tom Gifford, Shipbuild Integration Manager, Tom Niven, Head of Assembly, Alan Dodkins, ACA Structural Design Authority, Ian White, Project Manager for Lloyds Acceptance

Charity

Over the last two weeks, employees at Rosyth have been raising money for the Children's Hospice Association Scotland. By holding bake sales, a Christmas jumper day (see back page), and a dress up as Santa day they have managed to raise over £300 and counting.

HMS Queen Elizabeth

Rosyth

HMS Queen Elizabeth LB04:

- It is forecast that 13 compartments will have been signed off by the customer following successful inspections last week. This includes the first compartments in 4 deck which have been targeted to open up areas for completion of commissioning paths required as part of the plan to flood up.
- In support of the inspection process all trades have continued installing the mechanical and electrical systems. The electrical team are expected to install circa 3000m of cable and terminate 1500 cores with the ventilation team on track to complete installation of 90m of vent.
- The pipe testing team are expected to have tested 100 spools last week and are also working through the first mechanical IA's (Inspection Audits).
- Last week 11 test paths were completed and offered to commissioning for sign off ahead of schedule.

Damage Control Zone 4

- UB14 outfitting package is underway and terminations released.
- P01 activities are progressing well throughout all sponsons and a number of compartments are now at paint and insulation.
- Cammell Laird is progressing well throughout CB04 at 2 and 3 deck levels.
- Plans are currently being made for the flame spraying of the GT intake splitters which will take place in January 2014.
- Scaffolding access and final welding of the catwalks at SP07, SP08, SP09 & SP10 is progressing.
- Aft aircraft lift guide rails are now being installed.
- SB03 to SB04 and CB04 (A to D) link-up integration work continues to progress. The final validation of scope is now complete at 8, 9 and 0 decks, with approx. 250 additional items identified.

Damage Control Zone 1/2

- CB02 carling ECR is now complete and moved back into P02 installation which re-opens the main cable runs through the damage control.
- The forward port alimack position is now shut down with the new position agreed on the forward starboard side. This allows final section of catwalk to be installed.
- GTA compartment upper levels paint and insulation is now complete, with a target for completion of 4 deck being set for Christmas.

Damage Control Zone 3

- Replacement Carlings in CB03 2 deck area is 40% complete.
- Two pilot compartment completion inspections in 6J and 6K ATU spaces are planned to take place this week.
- Work to complete ATU 2 continues to progress toward a completion date of late January 14.
- Ships lighting for DCZ3 is now 70% complete.
- Link up area between blocks 2 and 3 continues to be a major focus both mechanically and electrically in order to free up Inter block cabling and pipework.

Damage Control Zone 5

- Blasting now complete in compartment 4TX5
- Switchboard in compartment 6UB6 now inspected.
- Behind lining inspection completed and passed in compartments 5TXO and 6TXO
- Work commencing on large bore GRE pipe that straddles LB04/05 link up

Undocking

Blast & Paint

- Shot blasting in double bottoms and bow tanks on blocks LB03, LB02 and LB01 is now complete.
- Painting in double bottoms and bow tanks on blocks LB03, LB02 and LB01 is progressing to plan.
- Preparations for hull blast and paint are nearing completion.

Shaft Alignment

- Port shaft line - Main A and Stern tube bearings fitted with resin chocking completed, boring out of Intermediate A on schedule to complete 15th December.
- Starboard shaft line – Main A and Stern tube bearings fitted with preparations being finalised for resin chocking schedule start 17 December.

Dock Block Removals

- Phases 1 – 3 paint completed with blocks being reinstated and put under load.
- Phase 4 is on target for schedule, start 18 December.

HMS Prince of Wales Tyne

HMS Prince of Wales CB03:

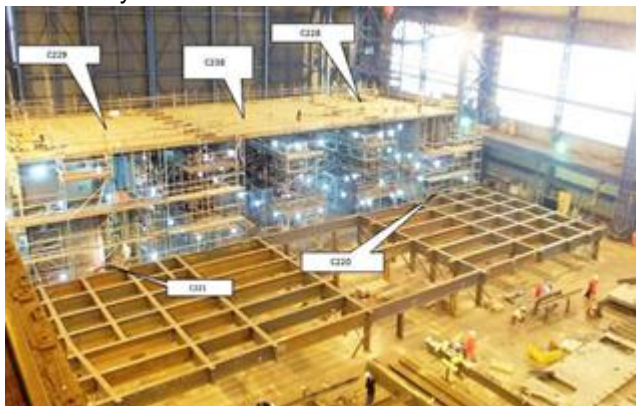
- Ring K was move from the paint cell over the weekend with work beginning on the join ups.
- Ring LK is now fully erect and Hotwork inspections are beginning.
- Ring L is now 3D with the first bulkheads erected.
- The ring H and J join up is now complete and pinning and painting in way of the join up has begun.
- Outfit continues in Ring J.

Merseyside

HMS Prince of Wales CB02:

CB02 Structures

- CB02 G units 220, 221, 228, 229 and 238 (2dk) all erected at berth- see image below
- CB02 G unit 220 now through its first PO1 inspection.
- CB02 flight deck units 236, 237 and 238 flight deck are in build with first erection in early January.
- CB02 F ring 214, 213, 217 decks all under construction.
- CB02 F ring 224, 226 and 227 bulkheads in fabrication within bay 11.



CB02 Outfit

- Outfit steel for unit 220 is now completed and installed. In addition pinning, studding and HVAC coamings are all fitted.
- Outfit steel for the remaining units are underway.
- Pipe manufacture is over 50% complete for G ring with installation of large bore lockout pipes commencing.
- All Major Subcontractor teams are now fully embedded on site and working to plan.

HMS Prince of Wales CB04:

- First steel deliveries received for CB04A have arrived with an expected cut steel date of 1st week in January 2014.

Portsmouth

HMS Prince of Wales CB02:

- Structural consolidation of Ring A is continuing at a good pace and will complete at the end of this week. Ring B has all its units on the build line and will be structurally complete before Christmas hits.
- Unit C239 has been moved round from Hall A to Hall B this week, and has also been 'topped and tailed'. This unit will be erected onto Ring C next week and will be the last unit to be erected this year. – **See photo.**
- After being brought round from Hall A to Hall B last week, unit C240 has been 'topped and tailed' and placed onto Ring C this week.
- With pipe installation progressing well, the focus is on making sure the 101's are coming through and being signed off. Pipe testing will commence this week on the 5225 spray system.



HMS Prince of Wales LB02:

- Having completed E ring 5 and 6 deck, SSSL have now completed 7 deck as well, which is allowing some work on E ring to start ahead of schedule.
- Lots of good work has started on the lift shafts in D and G ring, which are complicated areas that need a lot of coordination to complete.
- Insulation has been progressing well in the electrical priority compartments on G ring with compartment 6GA8 being completed this week, allowing containment to get underway in there.
- Pipe installation is progressing, 8,039 pipes have been installed to date. Pipe testing is continuing on all rings.
- Cable install is continuing on all rings will almost 89,000 metres being pulled to date, with almost 7000 terminations as well.
- General Electrics (GE) have completed the HV Switchboards link up and servicing this week.
- DG maintenance completed 2 days ahead of schedule.

Govan

HMS Prince of Wales LB03:

- The compartment handover inspection programme remain as the main focus this week with 14 achieved in week 49, 15 expected to be achieved last week with a further 16 to be inspected this week..
- All of the teams have been working together and have achieved 376 out of 520 CHOIs to date, despite the challenging programme to block completion.
- Ticon are continuing to focus heavily on progressing the ceilings and linings, particularly within the cabin flats on 6 and 7 deck and the dining halls, galley and bakery on 5 deck, which allows electrical work such as smoke detectors, sockets and lighting to progress.

- Imtech are progressing well fitting 89m of vent last week while working in all available ATU compartments and completing vent installations in complex areas such as the Galley and Bakery.
- 115 mechanical audits and 180 pressure tests on pipe spools have been signed off last week.
- LB03 Electrical scope continues to progress well with 1883m of cable installed, 855 terminations completed and over 630 cable cores checkwired.

HMS Prince of Wales LB04:

- Last week saw a number of successful quality inspections taking place on the block.
- 16 PO1 inspections have been conducted to a high standard with minimal observations raised.
- Audits on pipe work are progressing with additional coaching in conventional hanger standards and use of hanger booklet this week
- Coaching has been conducted throughout the week on 'right first time' approach to inspections.
- To date there are 136 (86%) units in preparation with 119 (75%) having progressed into the fabrication stages and 94 (60%) being successfully delivered into the Shipbuild outfit hall.
- In the 7 deck cabin areas this week work was carried out preparing the decks for screeding and conducting pressure tests on the pipework.
- Paint spraying started on the 6 deck cabin areas at the end of last week.
- Pipe installation continues to progress well, with 5049 installed against a planned figure of 4420. This has allowed the mechanical inspections to progress in advance of the planned dates as well as the pipe testing.
- PO1's last week, there was a planned figure of 166 hot work inspections – 159 having been submitted, 143 have now been fully Barcoded through CMS, six have been achieved partial and 10 are QC achieved awaiting Barcodes.

