

3rd March 2014

News

CB04 Handover



Image above shows l-r Eddie Purves, Ian Duncan, John Drummond, Sean Donaldson, and Joe Reilly

On 25 February the formal handover for CB04 took place in the Queen Elizabeth Boardroom, Rosyth. At the formal handover, the Block Handover completion pack was signed off by Babcock Director and General Manager Sean Donaldson, Project Director Cammell Laird's John Drummond, ACA Head of Build Assurance Ian Duncan, and for and on behalf of BAE Systems, Eddie Purves. Joe Reilly ACA Queen Elizabeth Delivery director presided.

Stuart Munn, Block Completion Manager noted; "this was a unique style of handover process created to meet the delivery forecast, and could only be achieved through the hard work and commitment of all parties. Everyone should be congratulated on achieving this."

Aircraft Lift Installation

189 tonnes of Aircraft Lift was successfully lifted into position on Friday 28 February. Bill Cairns, Production Manager, along with the Heavy Lift team and MacTaggart Scott have achieved another major milestone in the project.



Spotlight on...

ACA Schedule Improvement Assessment Update

ACA Schedule Improvement Assessment Update

Last week was the final week of the Schedule Improvement Assessment that Newton has been undertaking since the beginning of January, and we would like to thank everyone who has supported the assessment. The response received from across the whole Programme has been fantastic and has allowed us to quickly get into the detail and understand both the challenges and opportunities. Also, a special thank you to the ACA team who carried out studies, collecting invaluable data on the blockers that prevent effective use of our working days.

Highlights from the assessment include the following areas:

Productive Utilisation Studies

440 hours of studies have been completed across different DCZs, trades, sub-contractors and also back, night and weekend shift work. Whilst overall productivity levels were in line with expectations for this type of build programme, there is certainly opportunity to reduce blockers and increase productive work. The main blockers to progressing jobs on the ship are related to daily planning of tasks, short term planning and sequencing of jobs, material availability and change related rework.

Planning

A significant part of the assessment has focussed on planning processes and systems, which are essential for prioritising tasks and giving visibility of the critical path. A number of improvement opportunities have been identified in the way that plans are created and managed and how they interface with other areas of the programme including supply chain and procurement.

Supply Chain

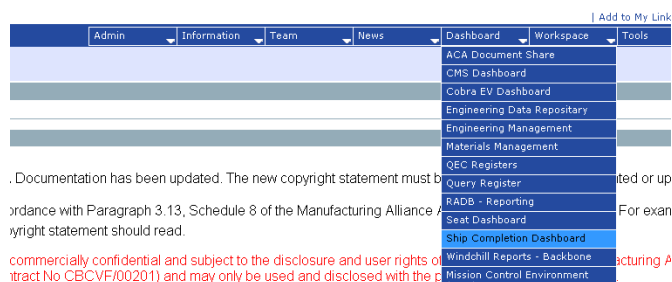
During the assessment, we also identified several opportunities for improvement within the supply chain that will improve the way materials are delivered through to the ship, reducing the number of delays in this area.

Next steps

This week we are developing plans for implementation projects that will address the key issues identified during the assessment phase. Once these plans are complete we will provide more details and information.

Dashboard Live

The Ship Completion Dashboard is now live on the SDE. Over the next few weeks presentations will be taking place on how this dashboard will be used, and how the information on it will support the completion strategy. This is being run by Engineering and Quality Control.



Documentation has been updated. The new copyright statement must be read or updated in accordance with Paragraph 3.13, Schedule 8 of the Manufacturing Alliance Copyright Statement should read:

Commercially confidential and subject to the disclosure and user rights of the contract No CBCVF/00201) and may only be used and disclosed with the permission of the copyright owner.

Updated to reflect this change. Please delete any draft copies you may have saved and replace with the new template.

HMS Queen Elizabeth Rosyth

HMS Queen Elizabeth LB04:

- The focus remains on getting the block ready for next month's handover to Babcock. DQAFF (Defence & Quality Assurance Field Force) completed the final individual ring audit on M last week and issued the sample for the whole block audit; scheduled for this week.
- The compartment inspection programme has continued with a firm forecast now in place to complete the outstanding hot-work ECR in the two remaining 4M compartments. This opens up the entire 4 deck area to complete the remaining integration scope from week 11 onwards.
- The Senior Ratings Servery (5PC2) has been through its pre-requisite behind lining inspection ahead of this week's compartment inspection.
- There has been further progress in the galley area (5QC3) with the high pressure test completed and signed off by Lloyds in the galley duct system. This allows the remaining galley hoods and ceiling grid to be installed in the compartment ahead of a forecast completion of circa week 1413.
- Good progress has continued on the IA (Installation Audit) programme with 172 test paths completed and signed off by commissioning against a planned baseline of 154.

Damage Control Zone 4:

- UB14 outfitting and cable installation is progressing well. BAE Systems(Chelmsford) have been on-site carrying out work in preparation for the arrival of the collapsible polemast, which is due week commencing 10 March 14.
- Painting and insulation of compartments is progressing at pace and PO2 outfitting is now well underway in SP07, 08 & 09.
- HVAC ducting installation is now opening up across CB04 and the sponsons throughout DCZ4.

Tanks:

- The CCI programme took another significant step forward this week when a further five compartments were offered up for CCI. This will bring the total to 36 of 173 Tanks CCI reviewed by next week.
- Air testing has progressed well with three of the large cofferdams successfully completing their ITR-06 Air Test. These have been presented to Lloyds and are expected to be signed off by the weekend.
- The Blast Programme is also progressing well with another five compartments offered up to Quality Control for their ITR-09 Blast Containment Inspection.
- Compartments 0NC0, 0NY0 and 0PY0 (AVCAT Tanks), 7MZ6 and 8MZ6 (Dieso Tanks) have been offered up to Quality Control for their ITR-10 Post Blast Inspection prior to being handed over for SSSL to commence their paint programme.

Shaft Programme:

- The Port Side shaft programme continued to progress this week with the No.1 shaft being located onto the rail system and prepared for the Voith coupling in way of the shaft tunnel.
- No. 2 shaft has successfully been located in its final position and the Shaft Bearing in 9QX4 has now been refitted.
- No.3 Shaft has now been secured onto the flanged Apex Coupling.
- On the starboard side the No.1 shaft has also been secured onto the rail system and the coupling is being prepared to be located over the shaft.
- Starboard No.2 shaft has now been secured onto the coupling flange in compartment 9QX5.
- This leaves only the port and starboard prop shafts to be shipped in place which will be completed in line with the plan over the forthcoming week.

- Both port and starboard tunnel bearings have had the Orcot Bearing Liners fitted and are awaiting their final positioning.
- Preservative is currently being inserted into the shaft centres prior to the closing of the shaft joint.

Hull Programme:

- SSSL continue to progress the Hull programme with the blasting now complete on Block 03 from the outer hull to boot top.
- Blasting commenced on Block 01 and 02 from the outer hull to boot top and on completion of this these areas SSSL will commence their paint programme which is planned to be complete by April 2014.

Damage Control Zone 5:

- ECRs on CBO5 and CBO6 started and are making good progress.
- Manufactured items for ECRs are now being fitted.
- Pipe installation has now started in CBO6.
- Aft mooring capstans installed in position.
- Critical tank link –up pipework now started.

HMS Prince of Wales

Rosyth

Manufacture

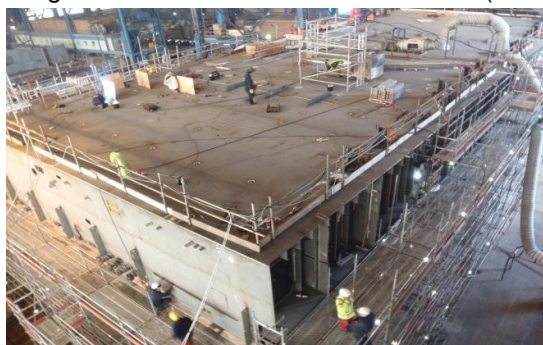
- SP09 – Unit 10 welding continues. Units 12 and 13 fairing and welding commenced. Fitting of PO1's, penetrations, doors and HVAC coamings all continue.
- QC inspections of 4 deck PO1's complete. SP06A, fitting of PO1's and penetrations continues.
- SP01 - Welding complete on lock out deck seats on 3 deck, save-alls fitted and QC requests submitted. Lock out items picked from central warehouse. PO1s being outfitted on 3 deck standing and 3 in number C&D coamings requested for delivery for 4 deck.
- SP03 - Submerged arc welding to the flight deck of unit 10 is now complete with only the horizontal KAT weld butt to the shell and welding within the confined space to be completed, of the units currently under construction within the Syncrolift.
- The gangway platform has now been installed to the shell external of 4HX9. Hilti first fixings and welded studs continue to be installed on all decks. P01 installations continue to 2 deck and painting has commenced on 3 deck 3HZ9.
- SP04 - spray painting of 4JX8 is complete with this area due to be inspected early week 48.

- Hilti first and second fixing installation is complete to 5 deck void space.
- Submerged arc welding is progressing at unit 13 to 15 butt and unit 18 is currently being tied in.
- SP05 – Unit 11 now welded and ready for QC inspection. Unit 14 is being welded. Two more compartments on 3 deck have been signed off by Lloyds. HVAC coamings are now being fitted throughout the sponson.
- SP06F - Units 12 and 11 welding is complete and are now with QC for inspection. Unit 10 manufacture is progressing well and should be complete in week

Merseyside

HMS Prince of Wales CB02:

- All ring G units have been erected at berth (see below).



- Painting, insulation and Hilti second fix equipment supports continues to ring G 4 deck compartments .
- Inergen Class 1 system installed into ring G 4 Deck compartment 4GB9 (see below).
- PO1 inspection G ring centre unit compartment 2GZ2 scheduled for 28/02/2014.
- Goliath Lifting lugs for CB02 ring G now in fabrication.
- Structural Dry Survey carried out to ring F 4 deck centre unit with lift, turn and erect to berth scheduled for over the weekend.
- Ring F 2 and 3 deck bulkheads being erected onto deck panels continues.



HMS Prince of Wales CB04:

- T girders and bulkhead fabrication continues for CB04 ring A and further 3 deck panels being cut.
- Preparation of load out equipment for Care & Protection for CB04.
- Manufacturing of pipework continues for CB04.

Tyne

HMS Prince of Wales CB03:

- All units for ring L erected and join up inspections ongoing.
- Hotwork inspections for ring L have begun ahead of move to the paint cell in March.
- Ring LK join up inspection was achieved on Wednesday 26 February allowing pinning and painting to be undertaken this coming week.
- Ring K is pushing on with outfit in compartments
- Ring H and J nearing completion and preparation beginning for Compartment handover inspections.

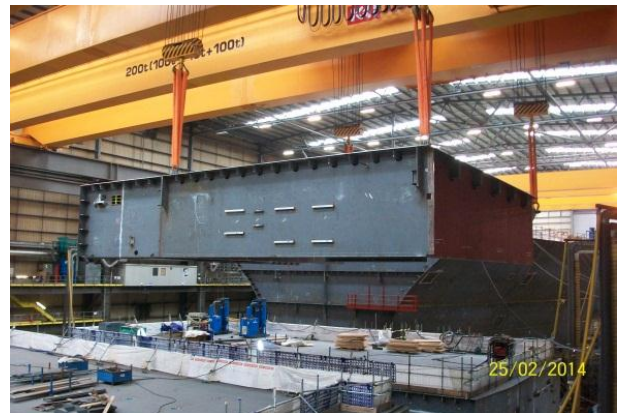
Portsmouth

HMS Prince of Wales LB02:

- There has been progress on the Hull painting programme with preparations started to containment to all keel blocks under the flat bottom.
- Once all tank testing is complete the shot blasting and painting will start in full.
- The tank testing has progressed with 9EX4 & 9EX5 complete taking the total to 80%.
- All cabins are back in final positions and flat packs will start construction this week, which will allow linings to progress along passageways.
- Linings are also being erected on 5F in the Mission Systems areas, in conjunction with local cables in the same areas.
- Ops room, 5GC0, is progressing well with underfloor containment nearing completion, and cable reeving started and at a high level of completion. Attention is also being focused on local cable runs to equipment in this area.
- BBES have started a night shift for cable reeving and now the total meterage is increasing. It now stands at 14500 metres with HVAC standing at 3751 metres installed.
- Pipe installation is progressing and ITR 101's increasing along with pressure testing of systems.

HMS Prince of Wales CB02:

- The final unit of CB02, Unit C231, has now been lifted onto C ring (2 Deck) ready for consolidation (Picture below).
- HB Hydraulics maintains great progress – achieving 130 pipes claimed fitted last week, which is ahead of plan.
- Successfully shipped all five cabins on A ring (3 Deck), achieving the CB02 February milestone.
- Painting activities on B ring (2 Deck) are progressing well and are due to finish this week, which will open up further work faces allowing outfit activities to take place.
- Mega Block Lifting Arrangement activities have now started on ring A, with ring B scheduled to start next week.
- Cable reeving on ring A has now commenced and is on plan and progressing well.
- Another Care and Protection Audit was carried out on CB02 this week, which again went well and included very positive feedback.



Govan

HMS Prince of Wales LB03:

- The main focus on LB03 continues to be the compartment handover inspection (CHOI) programme.
- The programme is progressing well with 14 CHOIs achieved in week 1408 and a further 19 compartments inspected last week.
- A further three compartments are expected to be inspected the following week (1410). All of the teams have been working well together and have achieved 483 out of 516 CHOIs to date.
- Ticon have a few areas remaining for insulation and have completed all ceiling and lining scope.

- SSSL have some remaining paint touch ups and are undertaking a large change involving the shot-blasting of the external shell.
- Imtech and Balfour Beattie expect to close out their programmes by surpassing their baseline scope for the Clyde; Balfour Beattie have to date installed 280,600m of cable on LB03, while Imtech expect to achieve over 5300m of HVAC installation.
- The mechanical pipe audits programme has now completed the baseline scope of which 8,631 spools have been pressure tested which leaves 34 to be conducted in week 9 to achieve the internal milestone of pressure testing scope complete.
- BAE Systems' electricians continue to progress towards completion with 1275 terminations completed this week and 24,400 cable cores checkwired to date.

HMS Prince of Wales LB04:

- To date 148 units (94%) have gone through the preparation area with 139 units (93%) having progressed into the fabrication stages and there are now 117 units (74%) erected in the SBOH.
- Last week it is expected that a further four units will have been assembled (LN31, LQ49, LN37 and LP47).
- The outfitting continues in the 6 deck cabin areas for the first batch of cabins coming in on 10 March with pipe testing now complete in ring R and S.
- The installation of the vent systems is currently progressing well and is allowing the insulation into the area in advance of the plan. 6S has been painted and is now with Quality Control (QC) with 5S to be offered to QC for inspection.
- Focus will move on to the installation of the exhausts on ring M, and the team are looking to undertake this complex task slightly earlier than planned to allow further acceleration of the unit erect programme. Picking up all the lessons learned from the Ship 01 Installation and the team involved.
- The installation of pipework and HVAC on the block continues to perform well with 7604 pipes now having been fitted against a planned figure of 6690 pipes and 709m of vent installed against a plan of 254m vents.