

The following is a brief overview of notable developments over the last year regarding the assembly of the Royal Navy's biggest ships.

#### 7 JULY 2009

Ceremonial steel cutting.

A major milestone was achieved when the Princess Royal performed the first cutting of steel on HMS Queen Elizabeth. The ceremony took place at BAES' facility in Govan and was attended by hundreds of dignitaries from the Armed Forces, politicians from Westminster and the Scottish Parliament, members and employees of the Aircraft Carrier Alliance, industry stakeholders as well as employees and some apprentices from BAE and Babcock.

#### AUGUST 2009

First shipment from Babcock's shipyard in Appledore.

The first sponson units were successfully delivered from Appledore to Rosyth, this being the first shipment for the Queen Elizabeth Class from Appledore. The sponson units make up the overhanging upper hull structure.

#### SEPTEMBER 2009

Babcock announces that modifications to No. 1 Dock in preparation for the final assembly and outfitting of the new carriers are now complete.

#### OCTOBER 2009

BAE take over VT.

BVT become wholly owned by BAE Systems and was renamed BAE Systems Surface Ships. Rolls-Royce delivers motion control equipment for Queen Elizabeth class aircraft carrier programme Rolls-Royce delivers the first part of its £96 million contract to supply a range of equipment to the Queen Elizabeth Class. The first pair of Neptune stabilising fins, designed, manufactured and tested at the Rolls-Royce facility in Dunfermline, Scotland, were transported to the BVT Surface Fleet shipyard in Govan, where they will be incorporated into the hull section currently under construction.

#### JANUARY 2010

Coronet Building opens at Cowes on the Isle of Wight. Head of Capital Ships Tony Graham accompanied by Cdr Owen McDermott formally opened the Coronet Building at Cowes. The facility is being used for the early de-risking of the advanced communications systems. By

testing the technology early in the process developers can locate problems early, find the right solutions and incorporate those answers at lower prices.

Cammell Laird shipyard to build £50million flightdeck for Queen Elizabeth aircraft carrier

Cammell Laird secure a £50 million contract to build the flight deck for the HMS Queen Elizabeth. The deal is expected to result in the expansion of the workforce at the Wirral plant which currently employs 700 staff.

## **FEBRUARY 2010**

Steel cutting Portsmouth.

Steel-cutting was carried out on a section of the hull for HMS Queen Elizabeth in Portsmouth. Portsmouth which will be the future home of both carriers.

## **APRIL 2010**

Bow sections delivered to Rosyth.

Lower Block 01 - the bow section of HMS Queen Elizabeth was delivered to Rosyth; the two sections made a six day journey by barge from Appledore, North Devon to Rosyth in Scotland. Delivery of diesel generators.

The forward diesel generators equipment package was successfully delivered to the BAE SS facility in Portsmouth in April. After a three-week voyage from Trieste, Italy, via Rotterdam, they arrived at Portsmouth Harbour on Sunday 25 April.

## **MAY 2010**

Completion of work on No 1 Dock.

Work on No. 1 Dock at Rosyth was completed and the contractor is preparing for hand back to Babcock. All repairs are complete on the vessel support blocks and the upper skidding system is currently being installed.

## **JULY 2010**

Power conversion specialist Converteam UK announced on 20 July that in 2009 it was awarded a GBP650, 000 follow-on contract by the MoD to continue the design, development and demonstration of high-power electrical systems for its EMCAT (electro-magnetic catapult) system.

A small-scale EMCAT system had been completed in 2007 to prove the operation of modern linear motor, energy stores and control systems. Extensive testing of the system has been undertaken, as well as further work to enable Converteam UK to scale the system up to a full-size catapult suitable for the Queen Elizabeth Class.

## **JUNE 2010**

The Aircraft Carrier Alliance launches its interactive website

<http://www.aircraftcarrieralliance.co.uk>

## **DUE AUGUST/AUTUMN 2010**

The Goliath gantry crane is expected to arrive at Rosyth. Built by Shanghai Zhenhua Port Machinery, the 68-metre gantry crane to straddle the dock will be able to lift up to 1,000 tonnes from three hooks, two suspended from an upper trolley and one from a central, lower trolley which will have a capacity of 500 tonnes. The individual capacity of each of the three hooks

provides valuable flexibility in lifting awkward loads and will allow units or blocks to be turned over. Nearly 90 reinforced concrete bored piles are being socketed three metres into the underlying rock on the eastern side of the dock as foundations for the crane, with further piles driven up to seven metres into rock on the western side.

## SUBCONTRACTS

£1.2BN worth of sub contracts for work on the QE Class have now been placed with companies across most regions in the UK. Notable sub contract wins include:

- Imtech Marine and Offshore Ltd in Billingham, Teesside, and Portsmouth for heating, ventilation and air-conditioning, worth £120m.
- Ship Support Services Ltd based near Rosyth for paint and scaffolding for the build process, worth £105m (SSS Ltd is a joint venture formed between Pyeroy in Gateshead and Cape in Wakefield).
- Henry Abrams in Glasgow for transport of sections of the ship from the yards across the UK to Rosyth for final assembly, worth £85m.
- Tyco in Manchester for fixed fire fighting systems, worth £15m.
- AEI Cables in Birtley, County Durham, for much of the 2,500km of cabling to be installed, worth £8m.
- £57m for insulation systems by Ticon Ltd UK, based in Glasgow, sustaining some 350 jobs;
- £25m for communication systems by Thales UK, Crawley site, West Sussex, which will secure up to 50 jobs;
- £1m for water treatment by the Ormandy Group, based in Bradford, West Yorkshire.