



The Royal Navy's surface fleet: in brief

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The Royal Navy is in the middle of an ambitious programme to upgrade its naval fleet with the purchase of new ships and submarines. The surface fleet is being entirely rejuvenated with new destroyers, frigates and at least one new aircraft carrier. This note provides a very brief overview of the Royal Navy's current and future surface fleet, focusing on warships.

There are 66 ships in the Royal Navy, as of April 2013. This is five fewer ships than in 2010 (source: DASA, [Bulletin 4.01](#)). The fleet consists of Landing Platform Docks, Landing Platform Helicopters, Destroyers, Frigates, Mine Countermeasures ships, River Class Offshore Patrol Vessels, Inshore Patrol Craft and Survey Ships. The Navy currently has no aircraft carrier. The last in service, HMS Ark Royal, was decommissioned in 2010 and the new Queen Elizabeth class aircraft carrier will not provide a carrier strike capability until 2020.

The newest and most eye-catching ships in the fleet are the **Type 45 Destroyers**, described by the Navy as the "most advanced warships the nation has ever built." HMS Daring, the first in her class, deployed for the first time in 2012. The sixth and final ship, HMS Duncan, is completing sea trials and is expected to enter service in 2014. Their primary role is to protect the fleet from air attack but they will also fulfil a wide range of tasks, including anti-piracy and providing humanitarian aid after natural disasters. The Type 45's are equipped with the Sea Viper surface-to-air missiles, a 4.5in gun, a 30mm gun, Phalanx short range machine guns and Lynx MK8 helicopter. They displace 8,000 tons. The six Type 45's are: HMS Daring, Dauntless, Diamond, Dragon, Defender and Dragon.

The 2010 SDSR envisages a future fleet of 13 frigates, the vessels that form the backbone of the Navy's surface fleet. Currently in service are the 13 **Type 23** (Duke) class. Designed primarily to provide an anti-submarine capability, they have evolved into a multi-purpose ship. The Sea Wolf air defence system will be replaced by a new surface-to-air missile system, Sea Ceptor, from 2016 onwards.

The Type 23's will leave service between 2023 and 2036 and will be progressively replaced with the new **Type 26 Global Combat Ship**. Current planning is for 13 to be ordered for delivery soon after 2020. BAE Systems began a four year assessment phase of the new frigates in March 2010. This is expected to finish in late 2014 with the main investment point around the middle of the decade.

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The new frigates will provide a specialist anti-submarine warfare capability, air defence and general purpose duties. They will be able to operate anywhere in the world in both littoral (coastal) and open ocean environments and either independently or as part of a task force. They will be equipped with the new Sea Ceptor air defence system. The Ministry of Defence is pushing its export potential but has not secured any co-funding partners as yet. The cost will not be finalised until the main investment point.

Currently under construction are the two huge **new aircraft carriers**. These will be the largest surface warships ever constructed for the UK and three times larger than the previous Invincible-class.

HMS Queen Elizabeth is expected to begin sea trials in 2017 and flight trials with the new F-35B Lightning II Joint Strike Fighter in 2018. She is expected to provide a carrier strike capability from 2020. The future of the second in class, HMS Prince of Wales, is less clear with a decision on its future put off until the 2015 Strategic Defence and Security Review.

Whether the UK needs aircraft carriers of this size is a topic of much discussion. Spiralling costs and repeated delays to the programme have also provoked considerable concern among Members. There are ongoing concerns about the costs of F-35B Lightning II, the aircraft chosen to provide the carrier strike capability, particularly as the Government has changed its mind twice over which variant to purchase (see Library Note: [The F-35 Joint Strike Fighter](#)). The most recent estimate of the cost of the Carrier programme, given by the Defence Secretary on 6 November 2013, is £6.2 billion.

HMS Bulwark, one of two landing platform docks, is the flagship of the fleet. There are four amphibious assault ships in service, including HMS Bulwark's sister ship, HMS Albion, and two landing platform helicopter ships, HMS Ocean and HMS Illustrious. HMS Illustrious was an aircraft carrier but was converted to a helicopter platform in 2010 after the withdrawal of the Harriers. She will be decommissioned in 2014. HMS Ocean will remain in service until 2019. There are no current plans to replace her. HMS Ocean is currently the largest warship in the Navy's surface fleet.

There are 15 mine counter measure vessels in service, 8 Hunt class based in Portsmouth and 7 Sandown class based in Faslane. Their primary task is to keep the sea lanes safe from unexploded ordnance. There are also four Offshore Patrol Vessels (OPV), one of which, HMS Clyde, is based in the South Atlantic. Three new OPVs were ordered by the MOD in November 2013 and will enter service from 2017. It is unclear whether they will replace or be in addition to the current OPV and the MOD says a decision will be taken at the 2015 SDSR.

The rest of the surface fleet is made up of ice patrol and survey ships, Archer P200 fast inshore patrol craft and Scimitar fast patrol boats which form the Royal Navy's Gibraltar Squadron.

A number of vessels have been withdrawn from service as a result of and since the 2010 SDSR. These include HMS Ark Royal and HMS Invincible, four type 22 frigates, six type 42 destroyers, a mine hunter, a survey vessel and several Royal Fleet Auxiliary vessels.

The most eye-catching decision of the 2010 SDSR for the Navy was the decision to decommission HMS Ark Royal and withdraw the Harrier fleet from service, and re-role HMS

Illustrious as a helicopter carrier. This leaves the Navy will be without a carrier strike capability until 2020 – a decision that has been hotly criticised.

The size of the future surface fleet of 19 frigates and destroyers, as envisaged by the 2010 SDSR, has also been questioned. Some analysts suggest is too few to fulfil all the tasks assigned to the Royal Navy. They point to a surface fleet of seventy frigates and destroyers in the mid-1970s, and have expressed particular concern about the ability of the UK to defend the Falkland Islands, should the need arise. Others argue the capabilities and weaponry of the new ships are far superior to past fleets or indeed to some of the current fleets of other nations with which the UK may be (un)favourably compared.

The frigate/destroyer surface fleet has progressively declined in recent decades. The 1990 Options for Change review reduced the number from 48 to 40, and reduced further to 32 ships by the 1998 Strategic Defence Review. The 2004 White Paper reduced that further to 25 from the then current 31, and the requirement for the Type 45 was reduced from 12 to 8, which was later reduced again to the current six (see Library Note [A brief guide to previous defence reviews](#) October 2010). Statistical comparisons with previous years can be found in table 4.01.01 of DASA's [Equipment Bulletin 4.01- Formations, Vessels & Aircraft](#).

BAE Systems is the lead supplier of complex warships to the Royal Navy. It has just completed delivery of the new Type 45 Destroyers and is currently working on the new Queen Elizabeth-class Carriers as part of the Aircraft Carrier Alliance. It is also responsible for pre-main gate work on the new Type 26 Global Combat Ship. It has three main shipyards in the UK: Govan and Scotstoun in Glasgow, and Portsmouth.

The company signed a Terms of Business Agreement (TOBA) in 2009 with the MOD that guarantees them a minimum level of surface ship build and support activity of £230 million a year. This was judged as the minimum level of work possible to sustain a credible warship-building industry in the UK. The TOBA was designed to encourage major reductions in the size of the industrial base on a managed basis.

In November 2013 BAE Systems announced that following a review of its shipbuilding facilities in the UK, it intends to end shipbuilding operations in Portsmouth by the end of 2014 and consolidate its shipbuilding operations in Glasgow. 1,775 jobs will be cut in total. It is therefore expected the Type 26 will be built on the Clyde. Philip Hammond said while the loss of jobs is regrettable, it was inevitable given that the Royal Navy's demand for ships can only sustain one shipbuilding location in the UK. The MOD ordered three new offshore patrol vessels as part of the agreement with BAE to provide work during the gap between the decline in work on the Carriers and the start of work on the new Type 26's.

The Ministry of Defence (MOD) has allocated £17.4 billion of its £159 billion ten year equipment plan on surface ships. This includes construction of the Queen Elizabeth Aircraft Carriers, the remaining Type 45 Destroyers, the design and development of the Type 26 frigates and the Maritime Afloat and Reach Sustainability (MARS) programme. The latter is Royal Fleet Auxiliary vessels, four of which were ordered from a South Korean company in 2012.

Further Reading

[Royal Navy website](#)

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Articles

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