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Contrails

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CAvSoc

HM Submarines

For our November talk Ray Jones gave us an insight into working on HM Submarines. Although not serving in the RN, but as an employee of Thorn EMI Electronics, his work took him on board for installation and testing of various items of equipment whether ashore or for sea trials.

He opened by explaining that the submariner's crest of two dolphins may only be worn by those who have undergone, and passed, the strict training regime needed to operate in the submarine environment. Further traditions are that the hat band only says HM Submarines as an insignia of the Silent Service. A submarine is called a boat which is the term given to submarines arising from the early days when they were carried on deck along with the other ships boats.

For non submariners at sea it was important to get on with the crew and to respect the customs. Ray had the responsibility of making sure his team would fit in with the crew and be able to react correctly to any emergency. Because they had an important job to do they would be tolerated at worst as a bothersome necessity, or, if they struck a good accord, as a shipmate.

We were taken through the elements of a submarine via the inside of HMS Alliance, the submarine museum at Gosport, and in particular the diminutive living quarters of a diesel powered WW2 boat, with some crew sleeping on a "hot bunk" sharing a bunk with a shipmate on the opposite shift. Post war, but similar diesel submarines belong to Porpoise class, succeeded by Oberon class boats serving until 2000.

Nuclear powered boats started with the one off HMS Dreadnought which was in effect a trial of the new power system using a USA power train and commissioned in 1963. Two Valiant class nuclear submarines which were laid down at the Vickers yard were commissioned in 1966 and used a British power system. Nuclear propulsion meant that the only operational limiting factors were the endurance of the crew and their supplies.



These boats were anti-submarine craft known as hunter killers but the RN then took on the nuclear deterrent with the four Resolution class Polaris submarines from 1967. Three Churchill class in the early '70s were improved Valiant class and served for 20 years to be reinforced and succeeded by six Swiftsure class then seven Trafalgar class from early '80s and being replaced by seven Astute class currently in build and in service.

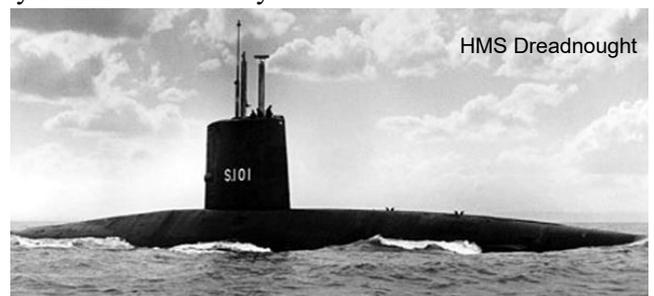
The ballistic missile submarines have also progressed from Polaris to Trident carrying craft represented by the four Vanguard Class serving from the early '90s to the present and of course to be renewed shortly.

A major milestone was noted in 2014 when women were allowed to serve aboard for the first time in 2014 – previously the restricted space constraints had prevented providing the extra facilities required – an indication of the improvement in the submariner's conditions. Another is the end of 'hot bunking' where sailors on different shift patterns occupy the same bunk – ie each sailor has their own bunk. However, sea riders are accommodated in the magazine alongside the weapons.

What had not changed in all this time was the role and conduct of Ray's team such as avoiding if possible working at night when red light rules were in force or becoming a dangerous 'knob twister' – someone who fiddles with controls they know nothing about.

To finish, Ray summarised the current weaponry with the main torpedo being Spearfish, introduced in 2008, with a speed up to 70mph and the older Mk24 and Mk8 torpedo. Additional weapons are tube launched missiles including Sub Harpoon, a sea skimming cruise missile - Tomahawk, a long range cruise missile for land targets.

The nuclear deterrent, originated with Polaris is now provided by Trident with a multi targeted warhead. Ray's talk was interspersed with anecdotes to lighten the serious topic of what is essentially a doomsday scenario nautical system.



HMS Dreadnought

Meetings Schedule 2020

Wednesday 08Jan2020

'Flying the Harrier' by Chris Marshall

Wednesday 04Mar2020

'Air Traffic Control' by Jane Johnston