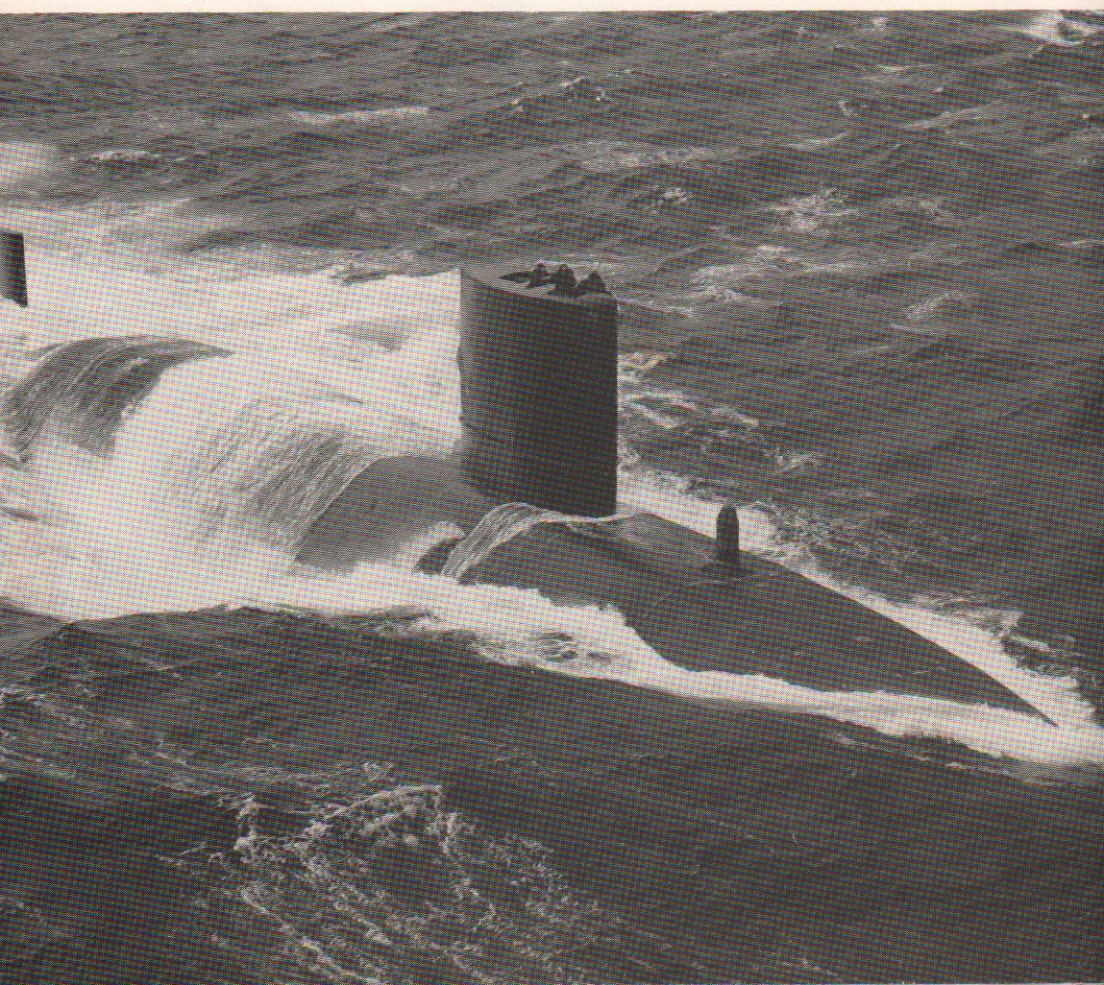




# HMS TRAFALGAR

NUCLEAR-POWERED FLEET SUBMARINE



## INTRODUCTION

Throughout history, sea power has proved a deciding factor in the ambitions of one country over another—and still does today.

And the deciding factor in sea power today is most likely to be the submarine.

Submarines can dive deep and stay deep—away from the highly dangerous surface of the sea, where vessels are easily located by aircraft or satellites and increasingly vulnerable to long-range missile attack. New knowledge of temperature and salinity layers in the oceans, which can conceal a submarine against the probing sensors of ships and aircraft, has created an underwater jungle for the submarine commander to exploit like a tiger in the shadows.

The *Submarine Flotilla* of the Royal Navy operates three basic types of submarine—the diesel-powered Patrol submarine, the nuclear-powered Polaris submarine, and the nuclear-powered Fleet submarine. The Polaris submarine carries the ballistic nuclear missiles which form Britain's contribution to the NATO strategic deterrence. Patrol submarines can conduct anti-ship and submarine attacks and are extremely useful in inshore roles such as surveillance, minelaying and operating with commandos or agents. The Fleet submarine, however, is the modern equivalent of the battleship. Its role is to seek out and destroy enemy ships and submarines in wartime anywhere in the world's oceans.

At present the Royal Navy operates 14 Fleet submarines and others are under construction.



*Ship's company with Lady Fieldhouse*

## HMS TRAFALGAR—Some Facts and Figures

HMS *Trafalgar* is the first of a new class of nuclear-powered fleet submarine and is the 13th submarine of this type to enter service with the Royal Navy. She was built at the Barrow in Furness yard of Vickers Shipbuilding and Engineering (the only yard building nuclear-powered submarines for the Royal Navy) and launched by Lady Fieldhouse on 6 July 1981.

The design particulars and performance of the *Trafalgar* class submarines are similar to the *Swiftsure* class. There have, however, been a number of improvements, notably in such areas as noise reduction and weapon system performance. HMS *Trafalgar* has a submerged displacement of just over 5000 tonnes and a surface displacement of 4700

tonnes. The submarine is 85.4 metres long while her pressure hull diameter of 9.83 metres is the same as the *Swiftsure* class. The submarine is the first to be fitted with a new design of reactor core which has been designed to give a longer life than earlier versions. Heat generated in the reactor, produces steam which is used to drive the main propulsion turbines and the turbo generators. Machinery has been mounted on rafts to reduce noise to the lowest possible level.

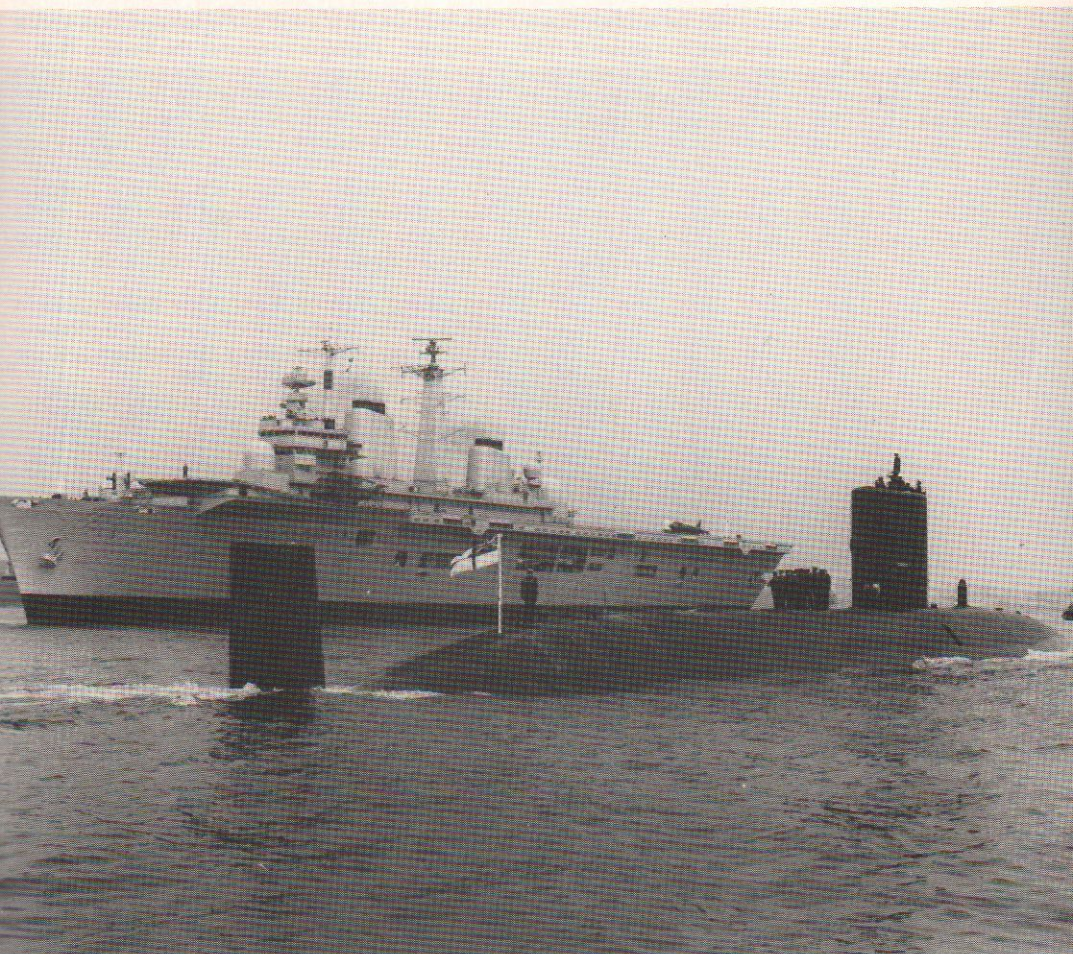
HMS *Trafalgar* is based in Devonport, Plymouth where she is a member of the Second Submarine

Squadron. She has a sea going complement of about 115—15 Officers, 45 Senior Rates, and 55 Junior Rates. Approximately 80 per cent of the Ship's Company live in the Plymouth area.

The submarine is presently affiliated to:—The City of Lancaster, the SCC unit TS *Trafalgar* in Wimbledon, Cheltenham College CCF and recently The King's Own Royal Border Regiment.

Other *Trafalgar* class submarines are HMS *Turbulent*, HMS *Tireless* and HMS *Torbay* (launched) with two others being built.

*HMS Trafalgar passing HMS Invincible*



## PREVIOUS TRAFALGARS

The first *Trafalgar* was a 106-gun First Rate Ship of the Line started at Sheerness in 1820. She was renamed HMS *Camperdown* in 1825 while still fitting out. In 1857 she became a coal hulk and was renamed HMS *Pitt* in 1882.

The second *Trafalgar* was a three-deck, 120-gun First Rate Ship of the Line started in 1825 at Woolwich. She was not launched until 21 June 1841, however, because the need for large battleships in the early Victorian period was so limited. She served in the Black Sea campaign of the Crimean War and was present at the great bombardment of Sebastopol by the Allied Fleet on 17 October 1854.

After the war she was converted into a steamship, having one of her gundecks removed. She still carried a full suit of sails as these early wooden steam battleships used their engines only for auxiliary power. HMS *Trafalgar* was brought back into service in 1859, but her type was soon superseded by the revolutionary new ironclads and she quickly became obsolete. In 1870 she was converted into a sea going training ship for naval cadets and in 1873 her name was changed to *Boscawen* and she was moored permanently at Portland. There she remained until 1906 when she was finally broken up. Her figurehead is still to be seen in Portsmouth Dockyard close to HMS *Victory*.

The third *Trafalgar*, started in 1886 was a recast pre-Dreadnought of very low freeboard which made her very restricted for speed in a seaway. She was however suited to service in the Mediterranean where she was commissioned as Flag Ship Second Division Mediterranean Fleet on 2 April 1890. Her last 14 years of service were spent as a Guard Ship at Portsmouth, a tender to HMS *Wildfire* and a Drill Ship for the Gunnery School at Sheerness, being sold for £29,500 in March 1911.

The fourth *Trafalgar*, 1945-1970, was a Battle class destroyer commissioned in October 1951 as a sea going training ship for Reserve Fleet personnel. In the Spring of 1952 she wore the flag of Flag Officer Commanding Reserve Fleet (FOCRF) for an East Coast cruise. A year later she wore the flag of FOCRf for the second time. In June 1953 she took part in the Coronation Review then, after a visit to Copenhagen with RNVR personnel, *Trafalgar* re-entered the Reserve Fleet.

In 1955 she docked for modernisation, and in May 1958 was commissioned for service in the Seventh Destroyer Squadron, Mediterranean Fleet, visiting Spain, France, Italy, Greece, Yugoslavia, Israel, Turkey, Germany, Holland and Norway. *Trafalgar* then participated in the Iceland Patrol 1959, during which time she foiled an Icelandic Gunboat's attempts to put boarding parties aboard two trawlers.

After being stationed at Malta, the ship returned to Portsmouth on 19 March 1963 to re-enter the Reserve Fleet for the third time where she remained until she was sold for breaking up in 1970.

