

WELCOME ABOARD



Her Majesty's Canadian Ship

RAINBOW (SS-75)



HMCS RAINBOW

PERSONNEL

The officers and men who serve in RAINBOW are all volunteers for submarine service. The entire crew previously served in the submarine HMCS GRILSE. The complement is seven officers and sixty-five men.

STATISTICS

The RAINBOW IS 312 feet long and has a beam of 27 feet. Her displacement is 1900 tons on the surface, and 2500 tons submerged.

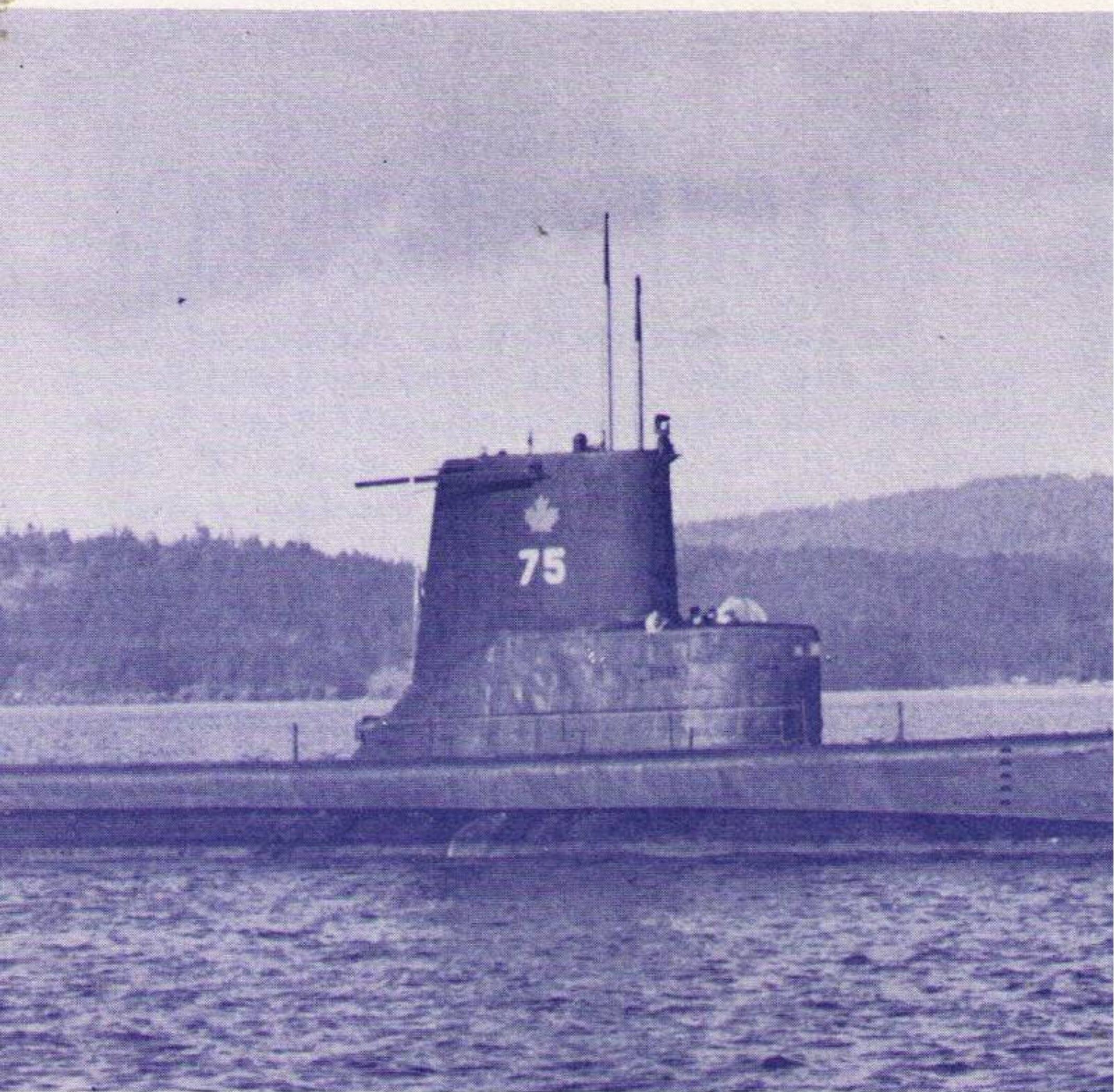
She has a surface speed of approximately 18 knots and a submerged speed of 10 knots, with an operational range of 10,500 miles at 10 knots.

WEAPONS

The RAINBOW is fitted with six bow and four stern torpedo tubes capable of firing either steam or electrically driven torpedoes.

PROPULSION MACHINERY

The main propulsion machinery consists of four engine-generator combination and two storage batteries, which, alone or in combination supply electric energy through the main control cubicle to the main motors, which propel the vessel.



PROPULSION MACHINERY CONTINUED,

Each main engine generator combination consists of a ten cylinder, opposed piston, Fairbanks-Morse diesel engine, rated at 1600 H.P., driving an Elliot 1000 KW generator.

The main storage battery is of Exide manufacture and consists of two 126 cell groups which can be operated individually, or in parallel.

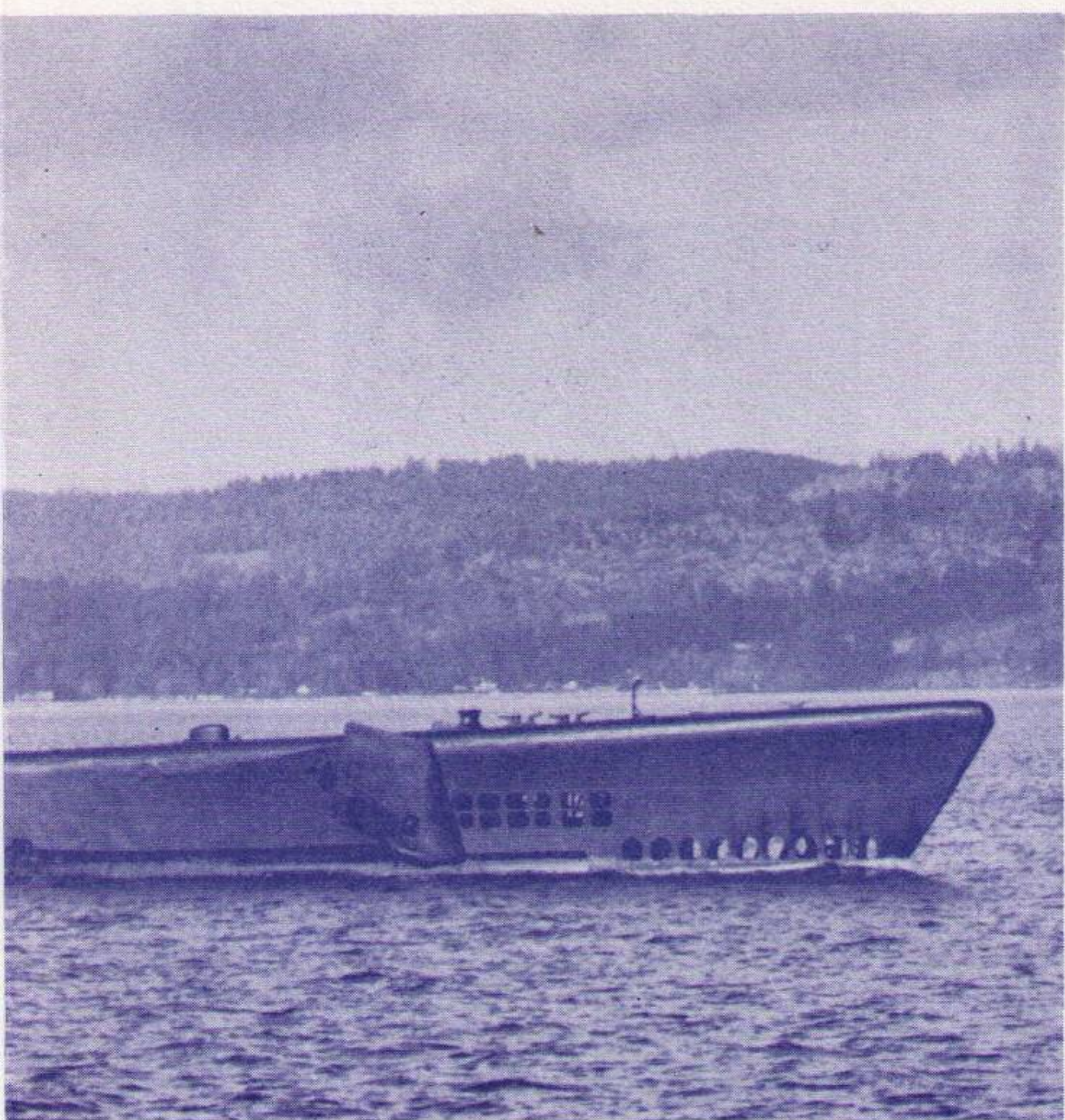
ELECTRICAL EQUIPMENT

The RAINBOW has complex electronic and electrical systems.

The main propulsion is direct current. Lighting, which is primarily DC is supplied by LMG's located in the After Torpedo Room. There are five 60-cycle motor generator sets providing AC for RADAR, SONAR, electronics, as well as utility circuits for other purposes, including AC lighting. Emergency lighting is provided directly from the Main Storage Battery.

ELECTRONICS

The RAINBOW is fitted with RADIO equipment for receiving and transmitting on low, medium, high, very high and ultra high frequencies. A long range passive sonar and an underwater telephone are fitted. One of the two periscopes has an antenna adapter enabling radar ranges to be taken with only the periscope exposed.



AUXILIARY MACHINERY

There are two Badger distilling units, located in the Forward Engine Room, each rated at 1000 gallons of water per day. The units produce water for domestic purposes and for the main storage batteries.

Two four-stage Hardie-Tynes air compressors are located in Forward Engine Room to produce the high pressure air required to operate the air systems. This air stored in six major airbanks is located in the ballast tanks, and is used for the interior service air systems.

A Rootes type low pressure blower is located in the pump room to provide the large volume of air required for blowing down the Main Ballast Tanks after surfacing. A freon refrigeration unit in the pump room controls the temperature of the submarine's cool and cold storage rooms.

Two air conditioning units are installed in the After Engine Room. Each of these freon units is rated at 11 tons.

The hydraulic system is supplied by two pumps operating in conjunction with a hydraulic accumulator.



LIEUTENANT COMMANDER RAYMOND C. HUNT

Lieutenant Commander HUNT was born in London, England, and was raised in Belfast, Northern Ireland. He started his sea going career as a cadet in the British Merchant Service. After obtaining his Masters Foreign Going Certificate in 1959, he served with the Royal Naval Reserve, until coming to Canada in 1961.

He served in HMC Ships CRESENT, and INCH ARRAN, before commencing submarine training in New London, Connecticut, in 1964. On completion of training, he was posted to HMCS GRILSE (SS-71). He was appointed Executive Officer of GRILSE in April 1968, where he remained until December 1968, upon the transfer of personnel to RAINBOW (SS-75).

In October 1969, Lieutenant Commander HUNT was selected for the Submarine Commanding Officers Qualifying Course with the Royal Navy.

On completion of the course, he assumed command of RAINBOW on 27 April, 1970.

HMCS RAINBOW

HISTORY

The submarine RAINBOW is the second ship to bear this name in the Canadian Armed Forces. The name has also been used eight times by the Royal Navy; the last of which was an "R" Class submarine which was built in the 1930's and lost during World War II. Other ships of the name date back to the battles of the Armada in 1588 and Cadiz in 1596.

The first RAINBOW to serve for Canada has long been associated with the birth of the Royal Canadian Navy. When the RCN was founded in 1910 the British Admiralty transferred two cruisers to Canada. The first of the two was HMS RAINBOW. She was commissioned for service as HMCS RAINBOW on 4 August 1910 and was therefore the first ship to bear the title "HMCS".

The first HMCS RAINBOW was a protected cruiser of the APOLLO Class and was completed in 1892. She had an armament of 2-6" and 6-4" guns plus 4-14" torpedo tubes, with a speed of 20 knots and a complement of 273 officers and men.

She was based at Esquimalt, B.C. until scrapped in 1922.

The present RAINBOW, the former US Navy submarine Argonaut, was transferred to the Canadian Armed Forces in December 1968. She is based at Esquimalt and provides submarine services and anti-submarine training for naval and air units on the PACIFIC Coast.

