



MARITIME FORCES PACIFIC



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Over the Municipality of Esquimalt looking west. Esquimalt Harbour and the peninsula of "Dockyard" in Canadian Forces Base Esquimalt is upper left. Work Point Barracks, with the large parade square, is lower right.

MARITIME FORCES PACIFIC

Canada has the longest coastline in the world, is boarded by three oceans and already possesses a legal claim to a continental shelf one-third again the size of her land mass.

Maritime Command of the Canadian Armed Forces is charged with the responsibility of protecting Canadian sovereignty and the independence of her sea borders.

The Commander Maritime Command, with headquarters staff in Halifax, Nova Scotia, commands all Maritime Forces on the Atlantic and Pacific coasts, the latter through the Deputy Commander Maritime Command with the title of Commander Maritime Forces Pacific with his headquarters staff in the Dockyard of Canadian Forces Base Esquimalt.

The Commander Maritime Forces Pacific has both a functional and a regional role. The functional role is to provide combat ready Maritime Forces as directed by the Commander Maritime Command, and to conduct maritime operations in the Pacific Ocean and the Canadian Arctic west of 90° West.

His regional commitments include conducting all military operations within Pacific Region which includes aid to the civil power, operation of a combined provincial warning centre and regional emergency government headquarters, responsibility for the training of sea, army and air cadets within British Columbia and coordination of search and rescue operations in British Columbia, the Yukon and the North-West Territories west of the Mackenzie River delta.

For functional duties his forces consist of the Second Canadian Destroyer Squadron, with four destroyers, the Training Group Pacific, with four destroyers, HMCS PROVIDER, and the Fleet Diving Unit (Pacific), all based at Canadian Forces Base Esquimalt. The air squadrons available for duty are 407 "Argus" Squadron, and VU 33 Utility Squadron, at Canadian Forces Base Comox.

Canadian Forces Station Aldergrove is the Communications Station located near Vancouver on the British Columbia mainland. It provides shore to ship/aircraft and ship/aircraft to shore radio broadcasts for all Maritime Forces Pacific, and other Allied naval forces in the Maritime Pacific area of responsibility. It also provides the link to the complete communications network of the Canadian Forces Communications Command.

Regionally his forces are organic Canadian Forces units and some belong to other government departments but are controlled by him for search and rescue or civil emergency operations. Search and rescue air units are located in 442 Squadron at Canadian Forces Base Comox, 120 miles north of Victoria and consist of De Havilland "Buffalo" aircraft, and "Labrador" helicopters. On the maritime side the Rescue Coordination Centre coordinates several Ministry of Transport Coast Guard vessels and one hovercraft which are based in Victoria/Vancouver, and operate throughout British Columbia coastal waters.

The Third Battalion Princess Patricia's Canadian Light Infantry stationed in the Base is available to assist in Aid to the Civil Power and civil emergencies.

Support for the Forces is provided by:

Canadian Forces Base Esquimalt provides complete personnel services for ships and establishments, supply services, ground transportation and construction engineering services.

Canadian Forces Base Comox provides personnel and materiel support for the two Maritime Command Squadrons, 442 Search and Rescue Squadron, and 409 Squadron of Air Defence Group, Air Command.

Ship Repair Unit Pacific provides running repair and up to third line maintenance for all naval ships and auxiliaries on the coast. It has a drydock capable of handling destroyer types, and through the Department of Public Works, access to the Government Graving Dock in Esquimalt Harbour which is capable of handling ships up to 250,000 gross tons.

The Naval Engineering Unit provides engineering services required for ship and related equipment, trials, maintenance, repairs and refits.

The Fleet Maintenance Group, located in HMCS CAPE BRETON, provides maintenance and repair assistance to ships, maintenance management of work orders and refit lists for naval manned vessels, care and custody of assigned unmanned ships, and limited accommodation and victualling facilities.

Fleet School Esquimalt conducts basic shore training for sea operations officers, and all levels of trades training for the majority of the sea operations mens' trades. In addition, a wide variety of individual and team training for ships and units is carried out in this complex.

Canadian Forces Maritime Evaluation and Test Range. Located in the deep water of the Straits of Georgia at Nanoose, about 90 miles north of Victoria, this joint United States Navy/Canadian Forces 3 dimensional underwater test and evaluation range is one of the finest in the world.

The Canadian Forces Armament Depot at Rocky Point. Located some 21 road miles from Esquimalt, it provides ammunition and ordnance maintenance services.

The Defence Research Establishment Pacific. Located in the Dockyard this National Defence Headquarters controlled unit conducts acoustic and electromagnetic research and development in support of Maritime Command and provides metallurgical and chemical analysis services for the Fleet and other units.

The Queen's Harbour Master. Provides civilian-manned Canadian Forces Auxiliary Vessels for Fleet support, salvage, target towing, coastal replenishment, harbour fire-fighting, as well as a small pollution control unit.

To support the functional role of Maritime Command Pacific there are approximately 3,500 service and about 3,000 civilian personnel. The majority of

the civilian work force, about 2,000, are employed by Canadian Forces Base Esquimalt and the Ship Repair Unit. Of the 3,500 military personnel, 1,700 officers and men serve aboard ships and 700 serve in the two Maritime Squadrons, and one Search and Rescue Squadron.

Although not extensive Maritime Forces Pacific is well-integrated. The small numbers and location of activities results in a well-knit little force.



CFB ESQUIMALT



Canadian Forces Base Esquimalt looking north showing A, B and C Jetties from left to right. The Harbour entrance is on the left and the road to Victoria on the right. The Ship Repair Unit complex is mostly centre right. Black Rock Battery is lower right and Duntze Head is the tip of land lower left. Across the Harbour from the left is Munro Head, The Government Graving Dock with "NADEN" top right.

CANADIAN FORCES BASE ESQUIMALT

PAST AND PRESENT

EARLY EXPLORATION IN THE NORTH PACIFIC

For two hundred years after a Greek pilot in the service of the Spanish Navy named Juan de Fuca claimed to have discovered the Strait in 1592 which now bears his name, the native peoples of the Pacific Northwest remained virtually isolated from European exploration - then the inevitable invasion began.

From the north in 1728 the Russian explorer Vitus Bering discovered the Strait between Asia and America which also carries his name, and in 1740 Alaska was sighted with the eventual establishment of Russian settlements.

From the south the Spaniards began sending exploratory missions to survey our coastal waters in 1774 and 1775 under Hernandez and Quadra. However, it was not until the arrival of Captain James Cook, Royal Navy, in 1778, aboard HMS DISCOVERY, that the region was explored and documented in some detail.

Entering Nootka Sound on the West Coast of Vancouver Island and landing at Friendly Cove, he exchanged trade goods with the natives for valuable otter skins. Later, on the same voyage of discovery, these furs were sold in China by members of his crew. Cook himself was killed by natives of the Sandwich Islands, now called Hawaii. A handsome profit was realized from this venture and soon an avaricious race began among the British, Americans and Russians, to secure the fur-trading rights in this region.

The Spaniards, aware of the great potential in furs were now determined to claim this new Eldorado and sent Martinez to seize formal possession of Nootka from the British and to erect a fortification. This spawned a chain reaction with international repercussions which was not resolved until 1795 when Spain renounced her claim and transferred sovereignty to Britain.

During the 1840s tension between the United States and Great Britain increased in the Oregon Territory over trading rights in the undefined North-West. Realizing that Britain might lose control of what is now the States of Washington and Oregon, the Hudson's Bay Company, the chief fur-trading enterprise on the West Coast, dispatched James Douglas to locate a new headquarters in British Territory further north. Douglas chose the present site of Victoria and in 1843 the main Hudson's Bay Company trading post moved from Fort Astoria on the Columbia River to the wooden stockade of Fort Victoria on the sheltered shores of the harbour.

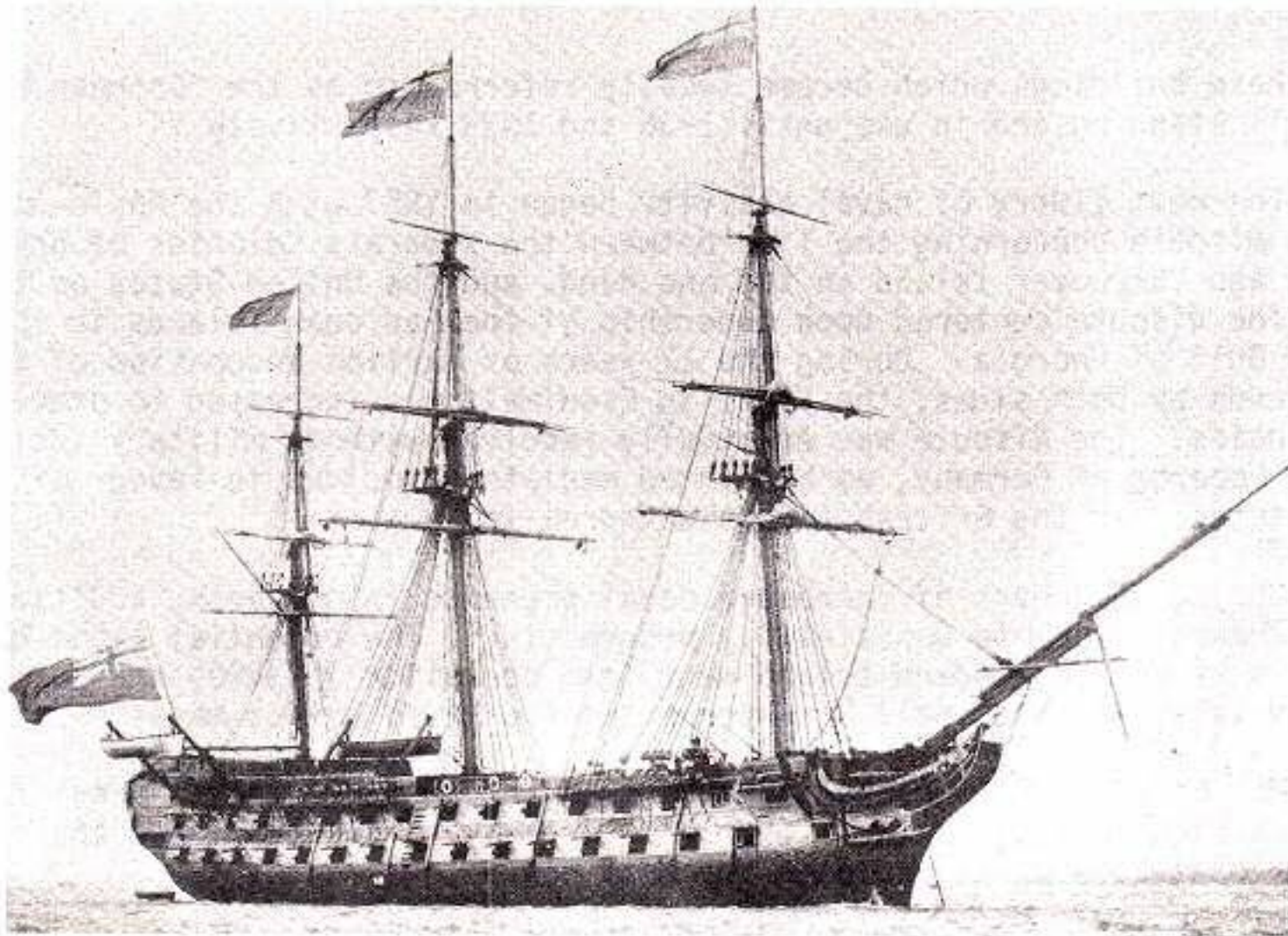
It soon became apparent that more protection was going to be required for the infant colony. It had been customary to detach ships for lengthy cruises in northern waters from the Royal Navy Squadron stationed at Valparaiso, headquarters of the Pacific Fleet, but the distance made this undertaking impractical. The Royal Naval base on Esquimalt Harbour was about to be born.

ESQUIMALT AND THE ROYAL NAVY

While the Spaniards Quimper, Galiano and Valdez had surveyed Esquimalt Harbour from 1790-1793, owing to Spain's policy of secrecy about her new discoveries, the harbour remained undisturbed by the foreigners for another 50 years.

Lieutenant Quimper had named the harbour "Puerto de Cordova" after the Viceroy of New Spain but when James Douglas surveyed the area for the Hudson's Bay Company for the site of a fort on British Territory, he adopted the Indian name "Is-whoy-malth", meaning "a place gradually shoaling", which in translation came to be called "Esquimalt".

With the arrival in 1846 of Lieutenant James Wood, Royal Navy, in the brig HMC PANDORA, a hydrographic survey of Esquimalt Harbour was begun. Wood was assisted by Mr. Inskip, the Naval Instructor of the accompanying frigate HMS FISGARD, who had 14 midshipmen under his instruction. From the FISGARD came many of the names about the harbour as is shown on Wood's chart published by the Admiralty in 1848.



The frigate HMS FOUDROYANT (ex-TRINCOMALEE), 42 guns, built in Bombay in 1819, and on Pacific Station from 1853-55.

From then this snug harbour became more widely used by Naval vessels and in 1848 the frigate HMS CONSTANCE became the first man-of-war to drop anchor. In 1851 the HMS PORTLAND became the first flag ship of the Commander-in-Chief Pacific Station to arrive in Esquimalt.

The development of sea power on the North Pacific has been attributed to the attack in 1854 on the Russian trading depot at Petropavlovsk on the Kamchatka Peninsula during the Crimean War. This battle saw British and French Naval Squadrons repulsed with heavy losses.

After their defeat the Allied Squadrons separated in confusion with the British arriving in Esquimalt with one captured Russian vessel, the SITKA, and many wounded. As no adequate accommodation for these casualties was then available on Vancouver Island, the ships had to sail hundreds of miles south to the American Naval Base at San Francisco for medical requirements.

This lack of a permanent naval base on British Territory in the North Pacific caused much needless suffering and early in 1885 the new Commander-in-Chief Pacific, Rear-Admiral H.W. Bruce, sought to provide a hospital closer to the scene of renewed operations against the Russians. He requested James Douglas, then Governor of the Colony of Vancouver Island, to provide housing for anticipated sick and wounded after the intended engagement. The three wooden huts which were subsequently built on seven acres of land at Duntze Head at the entrance to Esquimalt Harbour marked the beginning of the Naval Shore Establishment of Esquimalt.

Two of these buildings which became locally referred to as the "Crimean Huts" were still standing and in use until 1936 and 1939 respectively.

The next flurry of naval activity began in 1857 with the Anglo-American boundary dispute concerning the line between the separate Colonies of British Columbia and Vancouver Island on the one hand, and the United States on the other. The dispute centered upon ownership of the San Juan Islands in the southern Gulf of Georgia. During the 12 years of partial occupation of the San Juan Islands by both sides, the Fleet in Esquimalt was increased to provide for contingencies. The dispute was eventually resolved without military incident when the Emperor of Germany, as appointed mediator, decided in favour of the United States, and the British troops withdrew to Victoria.

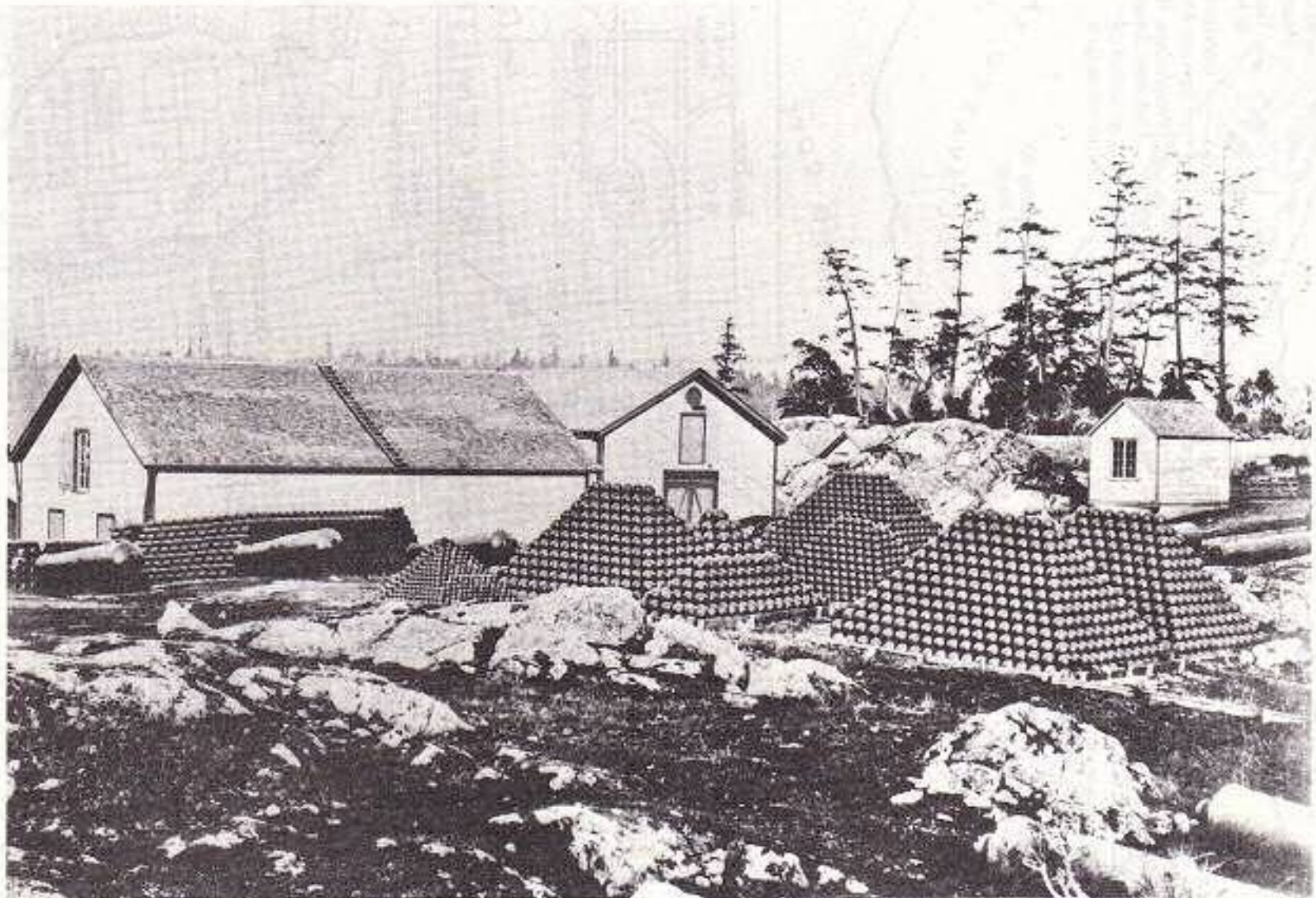
During the years of increased naval presence in the area, additions to the local maritime scene was steadily progressing. The essential light-houses at Race Rocks and on Fisgard Island went into operation in 1860, and in the same year Cole Island in Esquimalt Harbour became the Naval Powder magazine.

Men of HMS THETIS hacked a rough road through the virgin forest from the Village of Esquimalt to Victoria over 3 miles away. This precluded the often dangerous boat ride which had been the only convenient route.

The first free school in the Colony was erected adjacent to the Naval Yard gate, doubling as a church on Sunday for the few local civilians as well as the "bluejackets". This temporary church was eventually replaced by St. Paul's Anglican Church on Esquimalt Road which was built at Admiralty expense in 1866, then moved bodily in 1904 to its present site. The Base Supply Branch building at today's Dockyard Main Gate occupies the site of the original church.

In 1862 the Royal Engineer detachment having completed the survey of the Western section of the 49th parallel, vacated its wooden huts at Skinner's Cove and returned to England. The quarters were subsequently occupied by the transfer of the Naval Hospital from Duntze Head.

Finally, on 29 June, 1865, the Royal Naval Establishment at Esquimalt was officially created to provide supply and maintenance facilities ashore for the Fleet. According to the international circumstances the headquarters for the Pacific Station, which stretched from Cape Horn to Alaska, was sometimes in Valparaiso, sometimes in Esquimalt, and sometimes wherever the flagship found herself. Now it was firmly based on British territory.



Armament stores ashore just after the official establishment of the Royal Naval Yard Esquimalt in 1865.

CANADIAN FORCES BASE ESQUIMALT - 1976

Since 1865 as naval activities expanded, the Naval Yard and the adjoining community of Esquimalt grew as well. By 1906 the Royal Navy personnel and Imperial Troops in the area had returned to England and four years later, by authority of the Naval Service Act, the Dominion of Canada inaugurated its own Naval Service and also inherited the former Royal Naval Dockyards on the East and West coasts. HMC Dockyard Esquimalt was on the map.

During the next 50 years or so which covered the two World Wars and periods of slump and rapid growth, an additional establishment was commissioned in 1922 on the north side of Esquimalt Harbour as HMCS NADEN. Its purpose was to provide training facilities and a barracks for the sailors in Pacific Command, and to do so occupied the land and buildings originally built by the Royal Engineers in 1858 above Skinner's Cove, and latterly used as the Naval Hospital complex since its transfer from Duntze Head.

Canadian Forces Base Esquimalt came into being on 1 April, 1966, as one of the organizational changes included in the program to integrate the Canadian Forces. HMCS NADEN became Canadian Forces Base Esquimalt and on 1 July, 1969, HMC Dockyard

and Canadian Forces Base Esquimalt were amalgamated to conform to the "Base Concept" of the Canadian Armed Forces. The designations of NADEN and DOCKYARD are still retained to identify their continuing functions but now under one Commander.

The Commander Canadian Forces Base Esquimalt, with headquarters in NADEN, is responsible to the Commander Maritime Command for the administrative control over all personnel and units assigned to the Base, except for those responsibilities specifically assigned to Commanding Officers of lodger units. He is also responsible for the provision of administrative and support service for 28 both on-site and satellite units, integral and lodger to the Base.

Integral units of Canadian Forces Base Esquimalt are those of the same Command as the Base, namely Maritime Command, and includes the Headquarters Maritime Forces Pacific, the Ship Repair Unit (Pacific) both formations being in the Dockyard, and units such as the Fleet School, Canadian Forces Hospital and No. 11 Dental Unit sited within the NADEN complex.

Lodger units of Canadian Forces Base Esquimalt are those belonging to another Military Command but given logistical and maintenance support by Canadian Forces Base Esquimalt, and include such units as the Third Battalion, Princess Patricia's Canadian Light Infantry stationed at Work Point (Forces Mobile Command), the Royal Roads Military College at Colwood (National Defence Headquarters), the Canadian Forces Ammunition Depot at Rocky Point (National Defence Headquarters), and other formations such as the 747 Communications Squadron (Canadian Forces Communications Command) in Dockyard.



Looking southwest over the original Village of Esquimalt, circa 1870, with St. Paul's Church below. The Church was moved east to its present site on Esquimalt Road in 1904.



Today the Base Supply building occupies the former Church grounds and the Dockyard gates are sited where the Esquimalt street car terminal was located.



Crest on Dockyard Gate

AS WE SEE IT TODAY

The road you have just travelled to reach the present Dockyard Main Gate is the same route that the sailors from HMS THETIS cut through the bush to Victoria in 1852.

From the gate west the road is called Hospital Road as the Naval Hospital was once located the terminus at Duntze Head. Until World War II, viewed from where you are standing, the land west as far as the brick wall you see in the distance was part of the Village of Esquimalt.

The building on your right accommodates a security unit from the Corps of Commissionaires under contract for this purpose throughout Department of National Defence properties. In the same building is the Canadian Forces Identification Unit where identity cards are processed for all service and civilian personnel of Department of National Defence in the area.

On your left is the Base Supply Branch building which administers and controls all supplies received by the Command which are warehoused throughout the area and distributed as required.

To your right again, behind the time-clock corridors, is the prominent weapons shops building. Here repairs and maintenance are carried out on all types of guns and other armaments carried aboard ships of the Command. The artistic metal emblem over the entrance depicts two fighting crabs.

Further along you will observe the long building on the left which is the ration supply depot which services all Department of National Defence units in the area with their victualling requirements, including frozen food, fresh produce and dairy products. The long low building directly across the street houses the metal finishing shop, and a plant where heavy equipment is steam cleaned. This building also houses a unit which cleans the huge links of ship's chain by bombarding it with steel shot.

The neighbouring two story building with the high tower is the Naval Fire Service fire hall in Dockyard. This essential service started with one fire engine in 1866, to be joined by a second engine two years later. Originally the effectiveness of this first fire brigade was contingent upon the number of ships in port because the sailors manned the equipment. Today the fire stations are continuously manned by civilian firefighters who have many national firefighting awards which attest to their effectiveness and efficiency.

The road traversing your path at this point leads on your right to the Ship Repair shops and the "Naden Graving Dock", and on your left to the Defence Research Establishment Pacific (DREP). The grey wooden building at the intersection now serves as the Health Clinic of the Department of Health and Welfare (Canada) who primarily attend to the medical needs and environmental health standards of resident civilian employees. In 1940, prior to enlargement of the Dockyard facility, it was a security check point for entry into the Dockyard.

Defence Research Establishment Pacific, formerly called the Pacific Naval Laboratory, provides scientific support and research in maritime defence problems. Originating in 1948 and occupying temporary war-time huts, the present building was erected in 1950 and subsequently enlarged a few years later. The Canadian Forces Auxiliary Vessel "ENDEAVOUR" built by Yarrows Ltd. shipyard as an oceanographic survey vessel and floating laboratory is in continuous use by Defence Research Establishment Pacific scientists and research personnel for marine research in the Pacific and Arctic Oceans.



Erected near site of original Naval Yard gate to commemorate the centennial of the establishment of the Royal Naval Yard Esquimalt.



The entrance to the Naval Yard in the 1920s showing the Bell Tower on the right.

Further west along Hospital Road you will see the Canadian Forces Warrant Officers' Academy on your left, which prior to 1940 was in the Village of Esquimalt having earlier been the site of the original free public school in British Columbia in 1863. During World War II it was HMCS GIVENCHY, a headquarters which administered Dockyard personnel. After the war it was used as a Reserve Training Centre until 1954 at which time it was modified, enlarged and commissioned HMCS VENTURE to provide an opportunity for young men to join the Navy on a short term basis with the ultimate aim of obtaining a commission. Originally a two-year plan it was later amended to include a tri-service program to be renamed the Canadian Forces Officer Candidate School. In 1970 its functions were transferred to Canadian Forces Base Chilliwack and the premises were subsequently taken over by the present Academy for the training of future warrant officers for all elements of the Canadian Forces.

Of particular interest is the "Centennial Cairn" at the western corner of the parade square. Erected in 1965 to commemorate the 100th. Anniversary of the Establishment of the Royal Naval Yard in Esquimalt, inside the cairn is a sealed cylinder containing memorabilia of the day such as photos of the past and present, local and service newspapers, and other items of interest.

The high brick wall behind the Cairn running south to the sea was the original eastern boundary of the Royal Naval Yard and later HMC Dockyard up to 1939. The extension to the north across the peninsula to Esquimalt Harbour was a wooden fence. The brick building behind the wall was built as a naval prison in 1899, with the warden's home immediately across the street. Canadian Forces Distribution Authority dispenses service publications from this site today.

A wooden guard house stood on the left just inside the "Yard" and adjacent was a fire bell post which was erected in 1901. Until it was removed in 1928 it not only signalled the occasion of a fire but also the hours of work for the civilian workers proverbially called "Dockyard Mateys".

The next road to the left passes the old prison and compound terminating 300 yards distance at the Gunnery Training Unit on the site of the former Black Rock Battery which formed part of the former coastal defences. A three-gun saluting battery to exchange compliments with visiting ships is also mounted here.

Returning to Hospital Road you will pass the residence of the Base Commander. This is the oldest remaining building in Dockyard (1879) and was originally built as the home of the former Engineer Superintendents.

Following Hospital Road further you will notice a long stone building on the top of the hill to the left. Locally referred to as "The Stone Frigate", it was built in 1904 as a barracks for the sailors who previously were required to live in bell-tents in open ground in all weathers while ashore. Today it provides quarters for the Sea Training Headquarters, the Roman Catholic Chapel and a detachment of No. 11 Dental Unit.

The small grey building at the base of the hill is staffed by personnel of the Postal Section for the Base to receive and distribute all mail for ships and shore establishments of the Pacific Command.

Across the street is a span of joined vintage buildings (1891) which are on the site of the first wooden-hutted "factory" built in the 1880s to provide repair facilities for the Fleet. Formerly housing the total maintenance shops for the ships, it now houses only the pipefitters' shop of SRU(P).



The oldest building in the Dockyard is the "Chief Engineers Residence". Completed in 1879, it now is the residence of the Base Commander who is also the Commander Technical Services Pacific.



"The Factory" - circa 1885

The impressive three-storied ivy-covered building ahead with the flag flying from the top is the headquarters building of the Commander Maritime Forces Pacific and certain of his staff officers. The Commander is the Senior Canadian Forces Officer in the Pacific Region (British Columbia). Next to the headquarters building is the Command Operations Control Centre with the Rescue Co-ordination Centre on the top floor. The original wooden building which occupied this site was replaced in 1901 by the present brick structure and has been used over the years for various purposes, including ordnance/storehousing and electrical/electronics workshops. From 1918 to 1922 it was the premises of the Royal Naval College of Canada after it was relocated from Halifax following the famous explosion in that city in 1917. The bottom deck was used for training while the top floor was the cadets' dormitory.

Across the street the low red brick warehouses were built in 1895-96 to store under lock and key gallons of that popular issue of "pusser rum". Alas, the traditional custom of "Up Spirits" was discontinued in 1972. If you went inside today, shut your eyes, and took a deep sniff, you'd probably get a good whiff of "Nelson's blood" still in the air! The iron grills on the doors attest to the value placed on such "attractive stores".

You will now come to that part of the Dockyard which was the site of the three original huts built in 1855 and later to be referred to as the "Crimean Huts". Reference to these buildings can be found on the plaque on the rock in front of the Admirals' House. The most southerly hut was replaced in 1885 by the greystone and brick residence which became the home of the Naval Storekeepers and their families. After 1905 following the exodus of the Imperial Forces back to England, it became the quarters of Mr. George Phillips who remained in charge of the Dockyard as the Admiralty Agent until 1910. He subsequently accepted the offer from the new Canadian Naval Service to continue as the Dockyard Manager and so remained in the house until 1917 when he was transferred to Halifax. The building later served as a hospital for the Royal Naval College from 1918 to 1921, and a storehouse until 1936 when Commander C.T. Beard, RCN, occupied it to begin the line of Senior Naval Officers Pacific to call this their home. The first officer with the rank of Admiral to move in was Rear-Admiral V.G. Brodeur, RCN, in 1945.

A short walk west takes you to Duntze Head at the mouth of the harbour. Named after Captain J.A. Duntze, RN, Commander of the survey ship HMS FISGARD which was the first British Ship to survey Esquimalt Harbour in 1846, this vital ground was used from the early days as a harbour defence shore battery. During the American Civil War when the British considered it possible that they could become involved, defensive security of Esquimalt Harbour was paramount and earthworks were built here to contain muzzle loading guns.

Later, during the Russian threat in 1878, the harbour defence was increased with the installation of muzzle loading guns on Brothers' Island located immediately off shore from the Dockyard gate. In constructing these earthwork gun emplacements the remains of 17 sailors buried on this original Naval Cemetery were exhumed and reinterred in today's Veteran's Cemetery located just north of the Officers' Mess at Naden across the harbour.

While similar gun emplacements were installed on the Victoria-Esquimalt shoreline over the years, it was not until 1895 that work began on replacing them with permanent concrete forts such as Duntze Head (1896), Black Rock (1899), and across the harbour mouth at Fort Rodd Hill, the largest establishment with three separate batteries of seaward-firing guns (1895-1900).

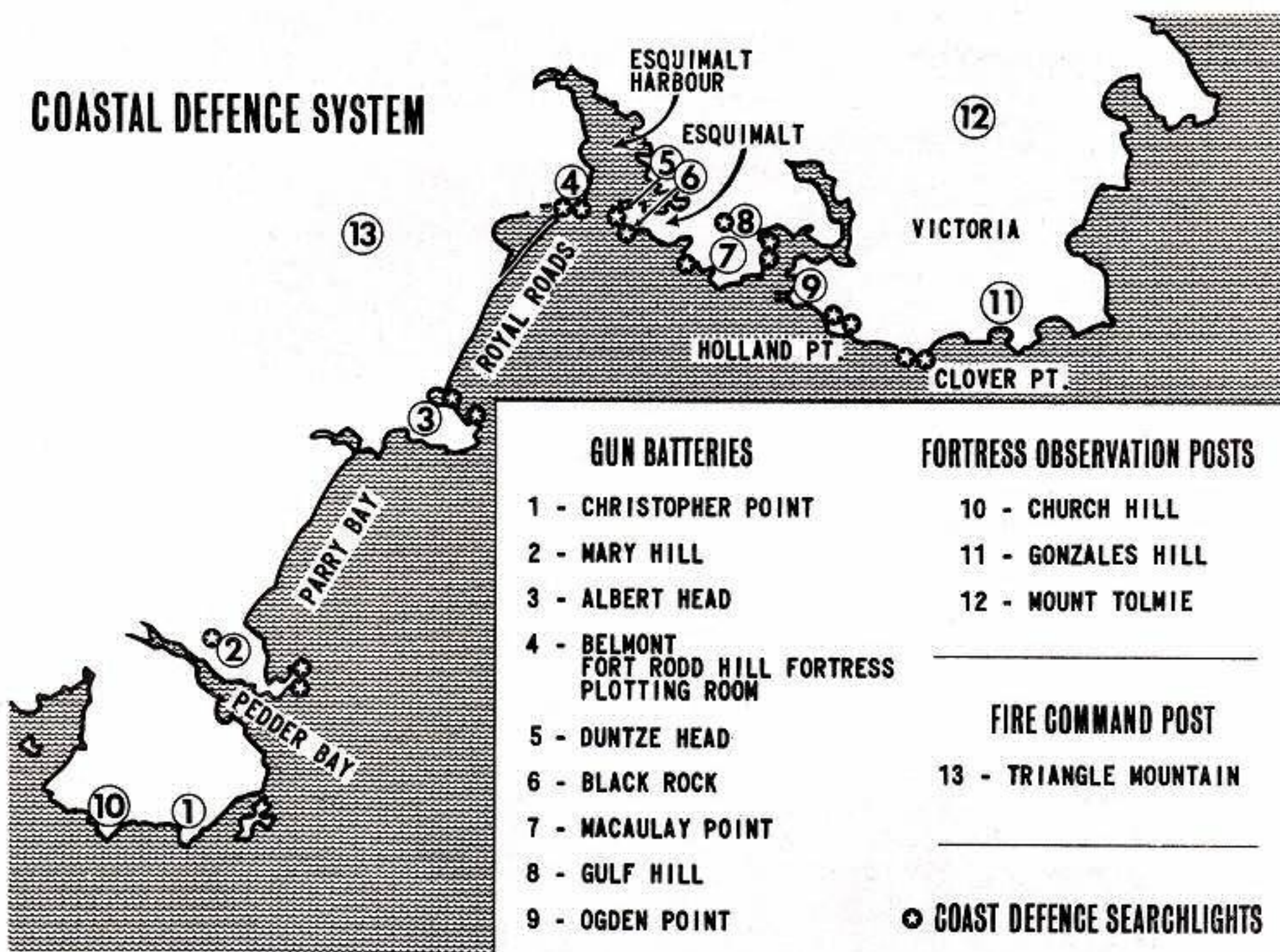


Two of the original "Crimean Huts" with today's "Admirals' House" facing.



"Admirals' House" - the former home of the Naval Storekeepers.

COASTAL DEFENCE SYSTEM



Coastal Defence System Chart



Duntze Head Battery - Dockyard - 1943



Black Rock Battery - Dockyard - 1943

In 1912 a battery of 9.2 inch breach-loading guns was installed atop Signal Hill which were to be the largest ordnance ever mounted for Canadian coastal defence. These guns were removed in 1939 and installed at Albert Head, a few miles southwest along the coast towards Race Rocks.

After World War II the local Coastal Defence System included batteries at Ogden Point (at the end of the Victoria Breakwater), Golf Hill and Macaulay Point (near Work Point Barracks), Black Rock and Duntze Head (in HMC Dockyard), and at Belmont (at Fort Rodd Hill). Heavy gun batteries were located at Albert Head, Mary Hill, and Christopher Point, the latter being near the Canadian Forces Ammunition Depot at Rocky Point.

The Batteries were controlled from the fire Control Post on Triangle Mountain in the Colwood area, and the Fortress Plotting Room which was built underground at Rodd Hill. A chain of 17 coast defence searchlights stretching from Clover Point (east of Beacon Hill Park) to William Head (below Mary Hill Fort) were mounted to cover the arcs of fire of the guns for night fire, and to illuminate the shore-controlled submarine minefields laid to protect the approaches to Esquimalt Harbour.

By 1956, technical advances in the art of attacking and defending coastal targets had nullified the effectiveness of shore-based gun batteries and Canadian coast artillery was declared obsolete. The guns were removed, and in the case of the Dockyard's "Forts" these former Army properties were transferred to Navy.

Fortunately, Fort Rodd Hill and its memories of the past have not fallen into oblivion. Initiated by a group of local ex-gunner coast defence officers, this area was eventually transferred to the Federal Department of Indian Affairs and Northern Development in 1962, along with the Fisgard Lighthouse, and designated as a National Historic Site. In 1975 this restoration program was extended to include the original powder magazine on Cole Island in the upper harbour.

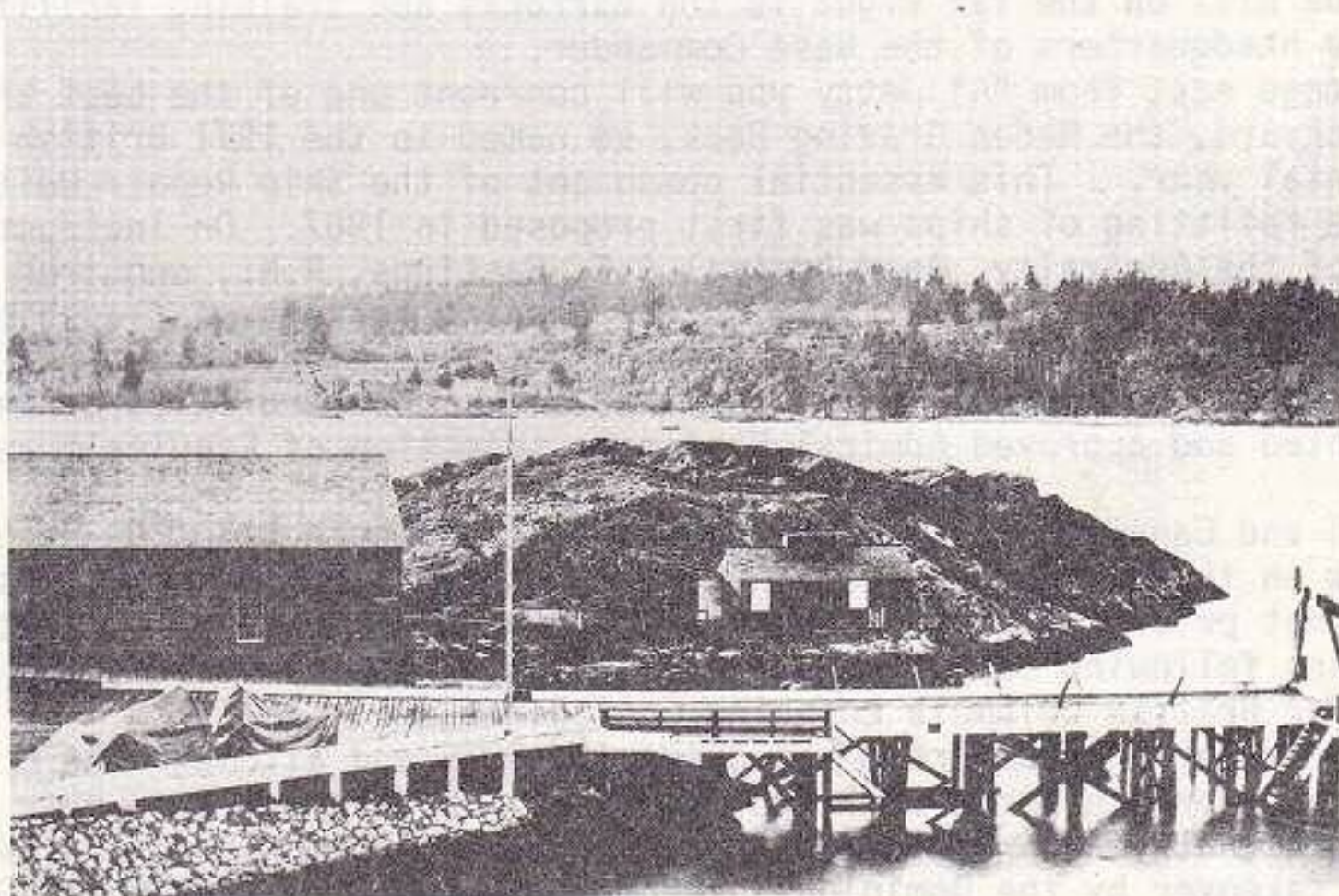
Today on Duntze Head the covered concrete gun emplacement still remains, as does the long wooden hut which was the officers' quarters during World War II, and is now a married quarters residence. On the point proper is a saluting dias where, on special occasions, as Canadian warships or those of foreign lands enter or leave harbour, the Admiral or his representative will exchange salutes as he stands on the platform which is flanked by two old muzzle-loading ship's cannon of the 19th. century. The large black painted anchors behind the dias were salvaged from the harbour bottom by divers and placed here as a reminder of the many commercial sailing ships which also used these sheltered waters.

As you turn back you pass the facilities of 747 Communications Squadron, at the corner of the road leading north to "A" Jetty. This signal centre occupies a brick building (1899) which for a time served as the Education Building for the Royal Naval College of Canada while it was located here.

Heading downhill towards the jetty, the high wooden building to your left was the former boatshed and today houses the rigging and sail loft upstairs and a repair and maintenance shop for small boats on the ground floor. The three multi-storied brick developments to your right are occupied by service shops of the Construction Engineering department which, as part of its function, is responsible for construction and maintenance work programs; the liferaft shop for the Ship Repair Unit (Pacific); and the lone solid stone and brick warehouse built on the shore line is part of the Base Supply system.



The Admiral taking the salute of HM Yacht Britannia as she passes Duntze Head.



In the 1870s this was the only jetty.

"A" Jetty occupies the site of the original wharf which only catered to small boats plying between ships and shore, ferrying passengers and cargo. Until the dock was later modified ships were unable to come alongside as they do today, instead they remained anchored out in the harbour while their small boats went ashore. Today this jetty usually berths our largest warships when they are in port, or those of visiting ships.

Bickford Tower on Grant Knoll on your left is a Communication's Tower (1901) and named after the Commander-in-Chief Pacific Station of the day, Rear-Admiral R.A. Bickford, RN.

From "A" Jetty you will see across the harbour on the western shore the Colwood supply warehouses, the fuel oil depot, the mooring base facility which services the Department of National Defence navigational buoys used on this coast, the Fleet Diving Unit and the Reserve Fleet. The latter are ships kept in a state of semi-readiness for activation as required, or those which have been decommissioned, declared surplus, and are awaiting disposal for resale or the wrecker's yard.

Directly north across the harbour is Munro Head, the former Yarrows No. 2 Yard which built cargo ships during the Second World War and is now used as a storage area for bulky and heavy stores such as small boats, anchors, propellers and chains, etc.

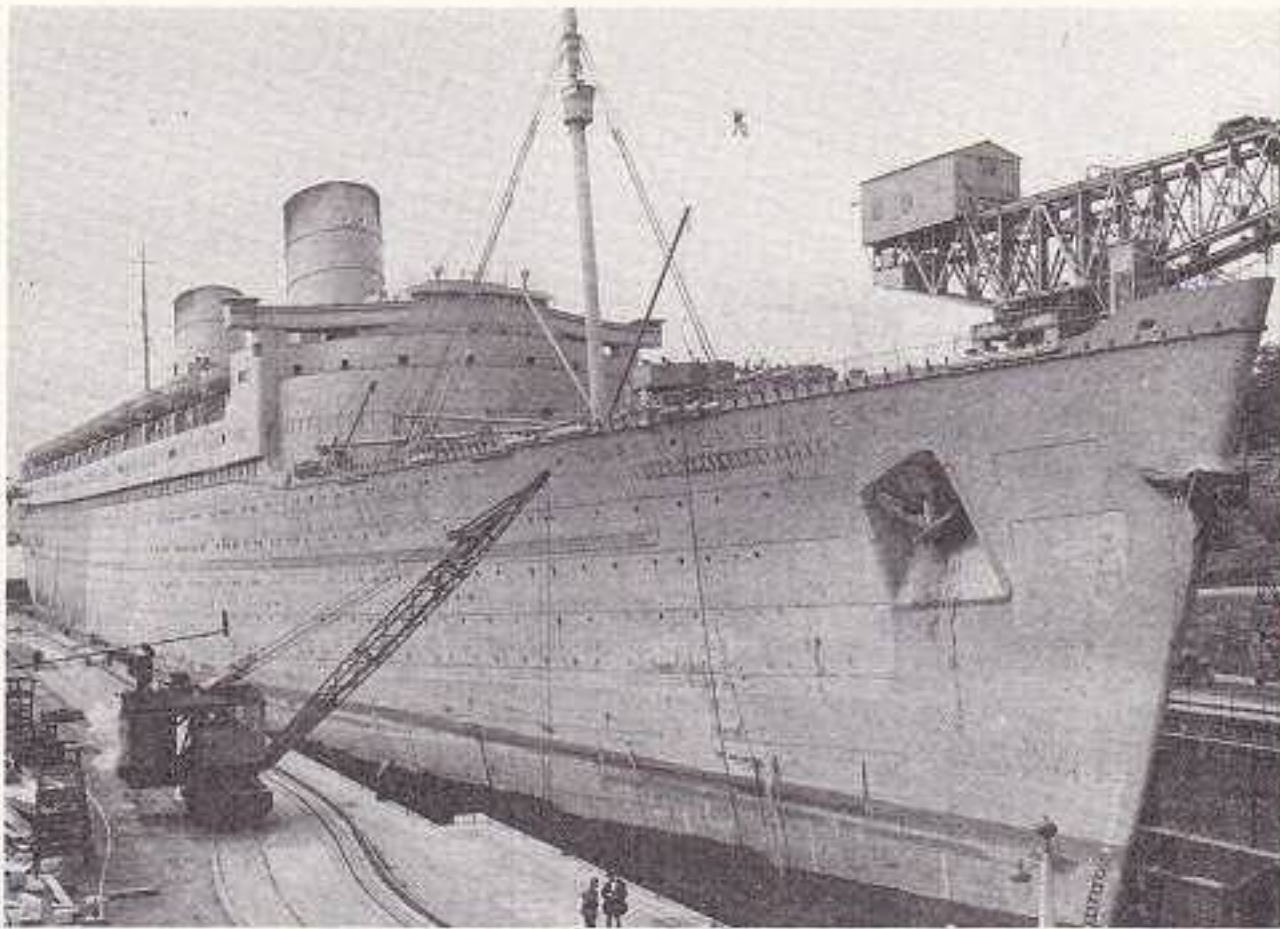
To the right is the Department of Public Works Government drydock which fills the former Skinner's Cove. Since completion in 1926, hundreds of ships of all makes and sizes have been drydocked. Perhaps the most memorable docking to date was that of the Cunard's QUEEN ELIZABETH in February, 1942, when this huge passenger liner was brought in under the most strict security arrangements to be converted into a troop ship. On a very high tide and assisted by many tugs she just squeezed in her 85,000 tons and 1,031 feet. She was a towering floating city for the thousands of troops destined to be transported by her to war zones in the Pacific, Atlantic and Mediterranean waters.

Naden on the hill on the far right is the barracks and training facility for the Base and the headquarters of the Base Commander.

As you proceed east from "A" Jetty you will confront one of the best known landmarks in Dockyard, the Naden Graving Dock, so named in the 1971 British Columbia Centennial year. This essential component of the Ship Repair Unit designed for the refitting of ships was first proposed in 1867. On instruction from the Lords of the Admiralty, Rear-Admiral G.F. Hastings, R.N., enquired into facilities afforded at the Esquimalt Station for docking vessels of flagship size, and selected a site for a dock. Although Governor of the Colony, Frederick Seymour, was in favour of the dock being built at either Burrard Inlet or Nanaimo, he finally relented and approved Admiral Hastings's selection of Esquimalt as the best site.

The British and Canadian governments agreed to contribute \$250,000 each towards the capital cost on the conditions that the plans be submitted to the British Admiralty, and that priority and free dockage be provided for all her Majesty's Ships for 15 years following completion. Interestingly, it also became one of the terms of union for British Columbia entering Confederation in 1871.

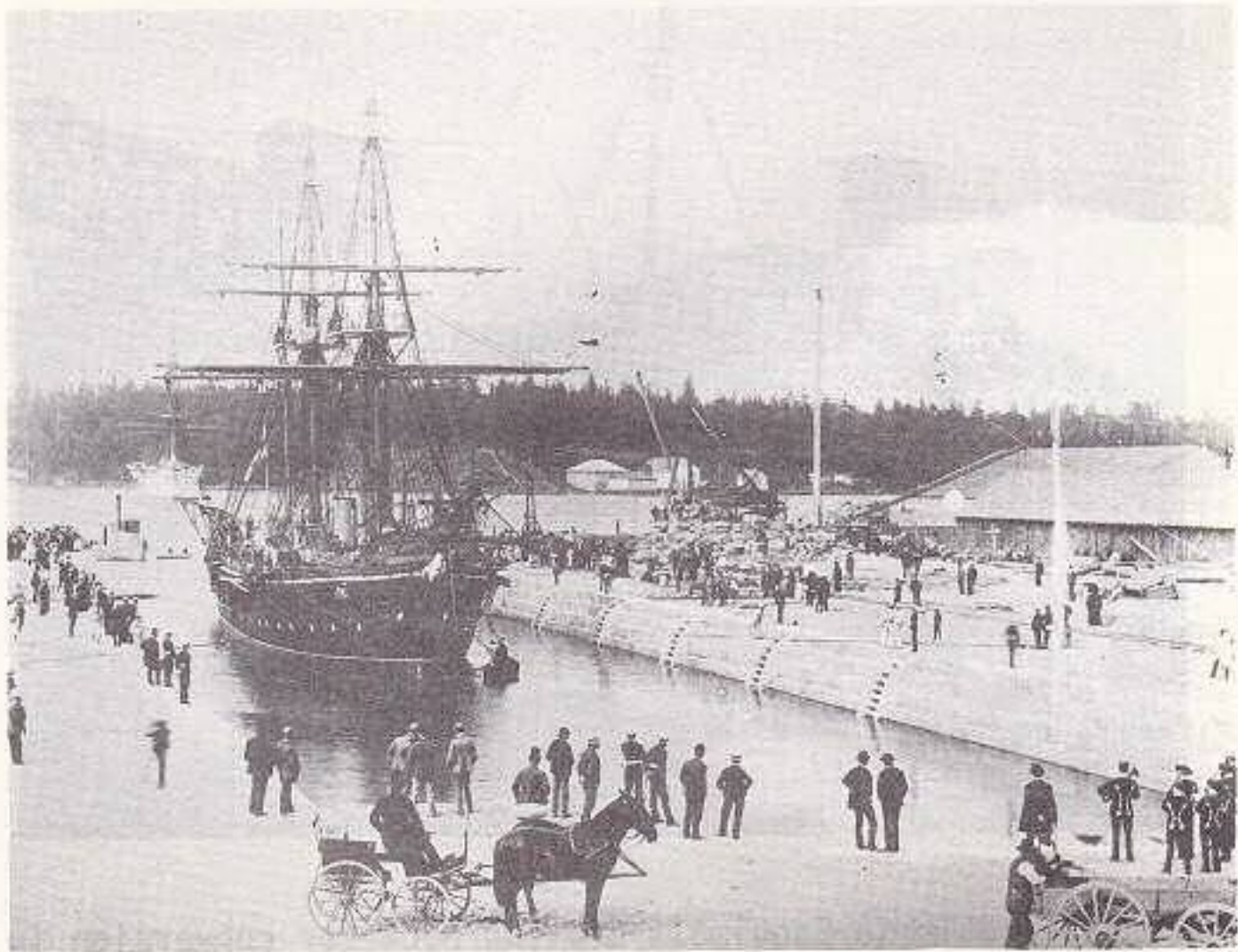
The first pile for the cofferdam was driven in 1876 and although the contractors stopped work in March 1879, the Provincial Government took over and completed the work that year. Further work stoppages during construction eventually resulted in the takeover by the Dominion Government because the Provincial Government had twice fallen due to financial mismanagement of the project.



RMS QUEEN ELIZABETH in Esquimalt Graving Dock for conversion in 1942.



NADEN, CFB Esquimalt, centre, showing Esquimalt Graving Dock upper centre right, and DOCKYARD peninsula upper left.



HMS CORMORANT entering the First Graving Dock in July, 1887.



The same view today with a modern DE in dock under refit.

On 20 July, 1887, the steam frigate HMS CORMORANT entered the drydock to be the first ship in for docking. Hundreds of vessels later and following the completion of the Dominion Graving Dock across the harbour in 1926, this "First Graving Dock" became redundant and in an unserviceable condition.

In June 1927, it was officially closed for drydocking operations and served only for berthing until 1947, when, after extensive repairs and installation of new equipments, it was brought back into service again as a drydock. HMCS COATICOOK was the first ship to enter after this rehabilitation thus ending eighteen years of idleness as a drydock.

On the left towards "C" Jetty you will pass such ship repair facilities as the machine, boiler and sheet metal shops. All shops operate under the Commander, Ship Repair Unit Pacific who is responsible for the provision of the complete maintenance servicing of the ships including weaponry and electronic/electrical equipments. It presently employs about 950 civilians of the complement of approximately 3000 civilian employees in Canadian Forces Base Esquimalt and area.

"C" Jetty originated in 1860 when two wooden sheds were built on Thetis Island located just off the south shore of the harbour to store coal for the warships on Esquimalt Station. From 1880 to 1886 the excavation fill from the First Graving Dock was deposited between this half-acre island and the shore. On this man-made peninsula an iron-coal store capable of handling 10,000 tons was built between 1899 and 1903. After the change from coal to bunker fuel, the emptied sheds were used for storage and today contains the sheet metal shop.

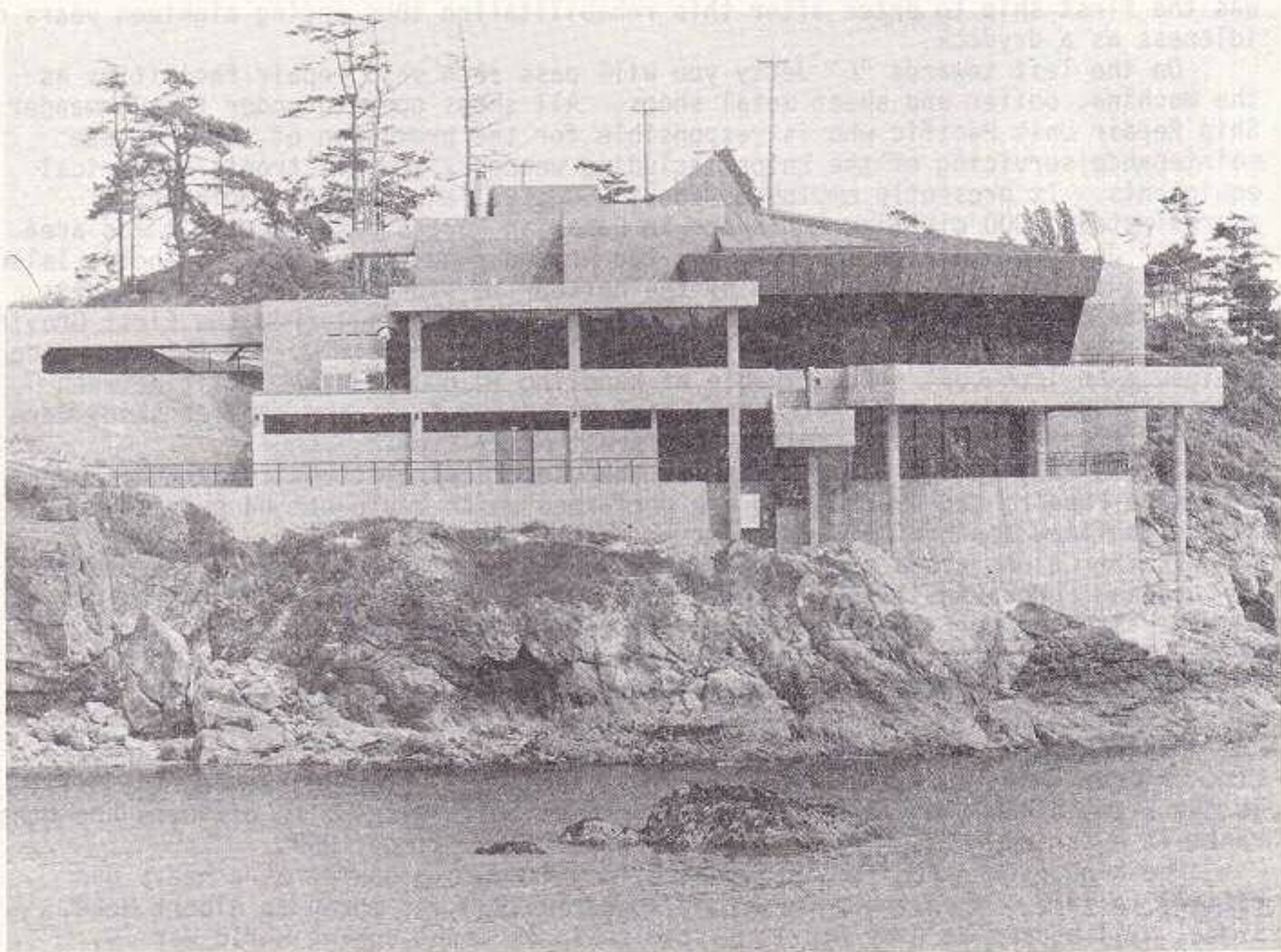
To the east behind these sheds are the electrical/electronic workshops where extensive repairs and overhauling are performed which could not be carried out in the confined space of a warship.

Further along are a number of wharves where smaller craft are berthed such as Canadian Forces Auxiliary Vessels, Royal Canadian Mounted Police patrol craft, barges, assorted work boats and the West Coast's only training sailing yacht, HMCS ORIOLE. From this point to the farthest eastern boundary is the Motor Transport compound and associated vehicles, the Ship Repair plastic shop, and Supply warehouses.

Beyond the fence is the ship building and repair establishment of Yarrows Ltd. Hidden from your view, behind Yarrows' large grey storage shed on the hill, is the Fleet School, which has provided professional training to officers and other ranks in a variety of service trades and specialties since 1952.

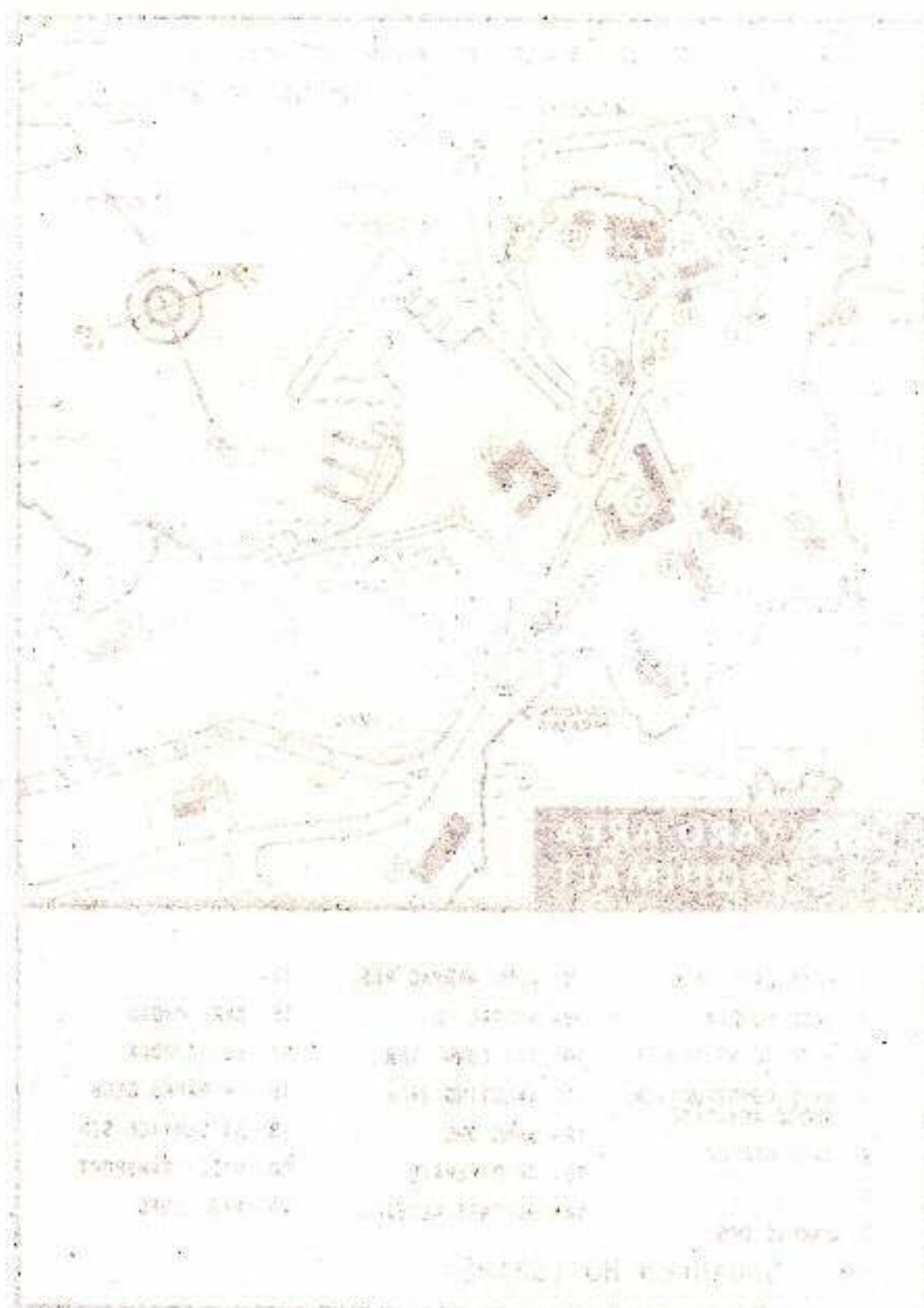
The high ground you see is Signal Hill which was prepared as a heavy gun battery in 1912. When the guns were removed in 1939 and moved to Albert Head, Signal Hill became an Army Quartermaster's Stores Depot during World War II, and then was transferred to the Navy in 1947. It is presently occupied by a communications unit.

Outside the Dockyard Main Gate and on the cliff-edge of the southern shore below Signal Hill is the Junior Ranks Mess. Opened in June, 1976, this very modern building was put up for the use of service personnel below the rank of sergeant, and is fully equipped for a very pleasant social life ashore. The Chiefs and Warrant Officers' Mess is situated about a half-mile further up the road towards Victoria, near the southern end of the Fleet School complex, and is housed in a high wooden building built in 1931. This former "pub" named the "Coach and Horses" boasts a publican lineage on the same site back to 1868.



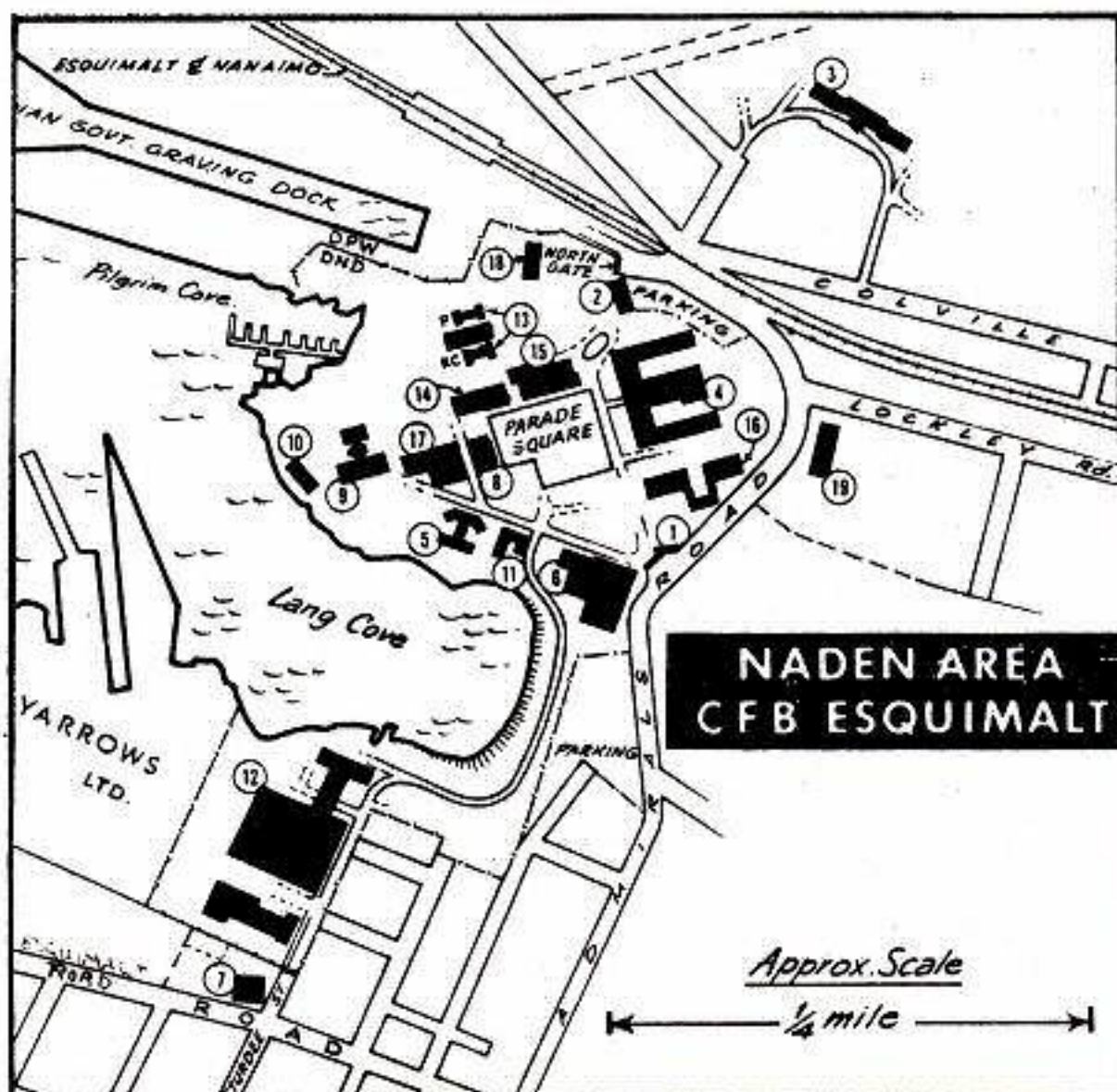
The Junior Ranks Mess opened in June, 1976, is located a short distance outside the Dockyard gate.

As you approach the Dockyard Main Gate, and the end of your tour, we hope that you have enjoyed your visit with us and leave with a clearer picture of Esquimalt's military past and present, and the facilities required to keep her fighting services "Ready, aye Ready" in peace and war.





MAP A



- | | | |
|-----------------------|-----------------------|------------------------|
| 1- MAIN GATE | 8- BASE EXCHANGE | 15- B/COMPT/SUPPLY |
| 2- SONAR SEC. | 9- SR RANKS (CLUB 53) | 16- MUSIC SCHOOL |
| 3- OFFICERS MESS | 10- HMCS MALAHAT | 17- COVERED DRILL SHED |
| 4- NELLES BLOCK | 11- DENTAL CLINIC | 18- BASE TRAFFIC |
| 5- BASE HOSPITAL | 12- FLEET SCHOOL | 19- DKYD REC ASSN. |
| 6- RECREATION CTR | 13- CHAPELS | |
| 7- SR RANKS (CLUB 91) | 14- | |

MAP B

MARITIME FORCES PACIFIC



SHIPS



IMPROVED RESTIGOUCHE DESTROYER ESCORTS

These destroyer escorts of the RESTIGOUCHE Class have been modernized to incorporate improved sensors (including variable depth sonar and a shipborne JEZEBEL system) and improved EW capability, the U.S. Navy ASROC medium-range, and quick reaction anti-submarine weapon system.

Detection range is doubled and the ASROC gives them a "kill" capacity range of several miles.

Ships in this class are the GATINEAU (DDE 236), RESTIGOUCHE (DDE 257), KOOTENAY (DDE 258) and TERRA NOVA (DDE 259).

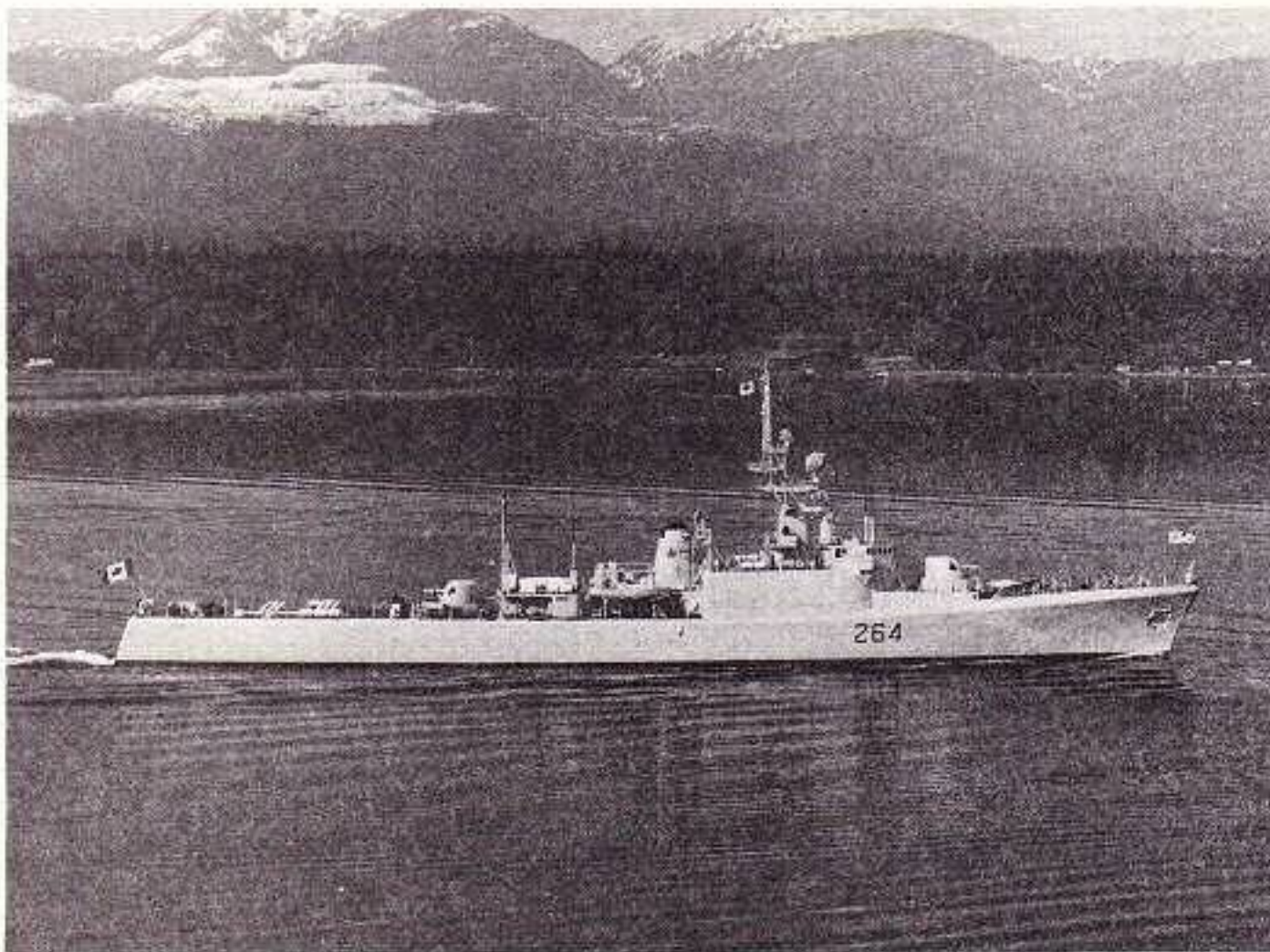
Displacement	2,900 tons (full load)
Dimensions: (length	371 feet
beam	42 feet
draught)	14.1 feet
Machinery	Geared turbines-two shaft
Speed	28 knots
Boilers	Two water tube
Armament	One twin three-inch gun One ASROC One triple-barrel anti-submarine mortar Homing torpedoes
Complement	214 officers and men
Cost	\$26,000,000. (approximately)



RESTIGOUCHE CLASS DESTROYER ESCORTS

The destroyer escorts CHAUDIERE (DDE 235) and COLUMBIA (DDE 260) of the RESTIGOUCHE Class have been used extensively for the training of officers and men of the Regular and Reserve Force, and are now in reserve in Esquimalt. The third ship of this class, ST. CROIX, is alongside in Halifax as a Harbour Training Ship.

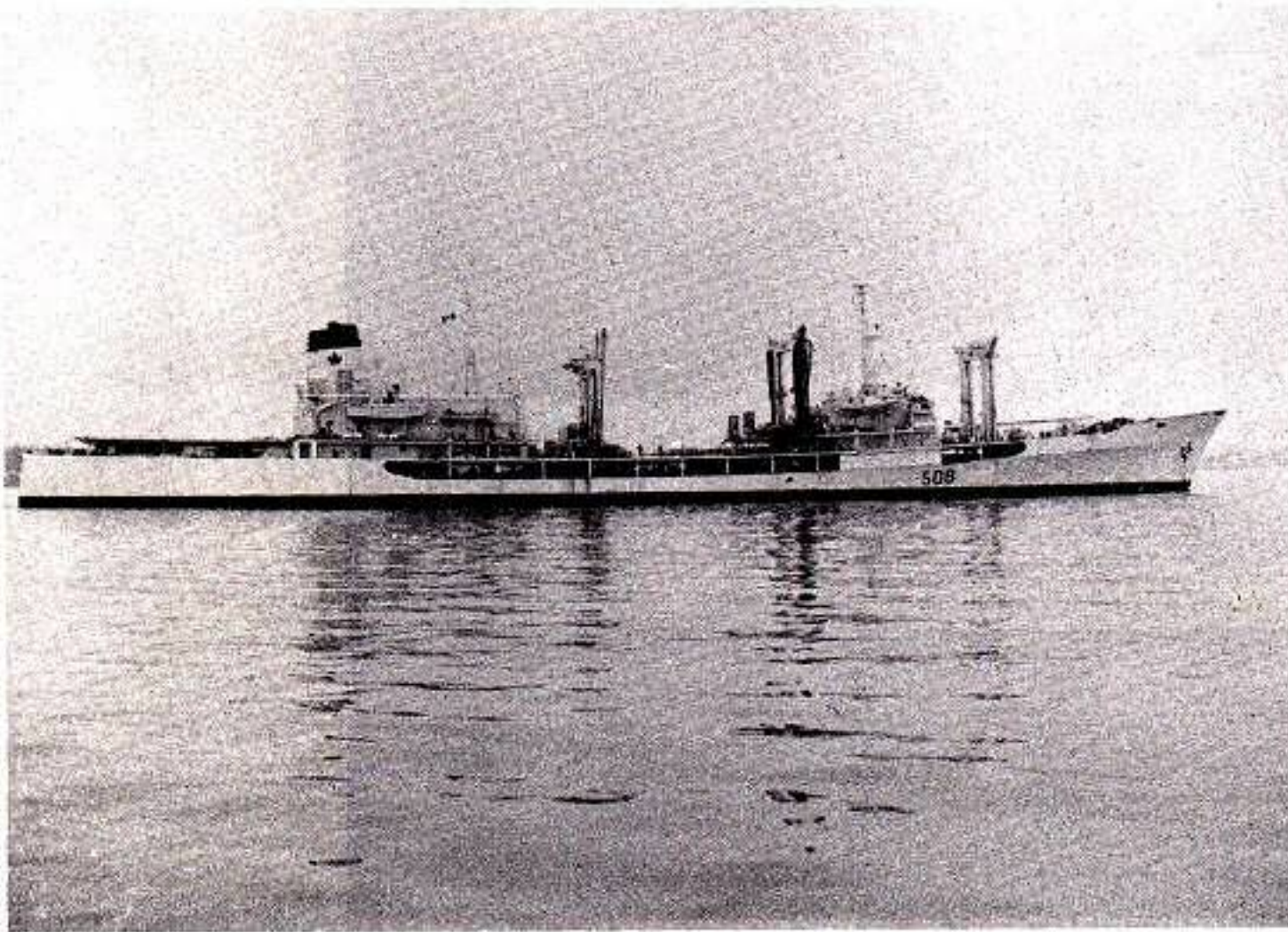
Displacement	2,800 (full load)	
Dimensions	Length	366 feet
	beam	42 feet
	draught	13.5 feet
Machinery	Geared turbine - two shafts	
Speed	28 knots	
Boilers	2 Water Tube	
Armament	Two twin three inch guns	
	Two triple barrel mortars	
	Homing torpedoes	
Complement	210 officers and men	
Cost	\$26,000,000. (approximately)	



MACKENZIE CLASS DESTROYER ESCORTS

The MACKENZIE Class destroyer escorts are MACKENZIE (DDE 261), SASKATCHEWAN (DDE 262), YUKON (DDE 263) and QU'APPELLE (DDE 264), and are designed primarily as anti-submarine warfare vessels with a limited surface and anti-air warfare capability. These ships are now used in a training role.

Displacement	2,890 tons (full load)	
Dimensions	length	366 feet
	beam	42 feet
	draught	13.5 feet
Machinery	Geared turbines, 30,000 SHP	
Speed	28 knots	
Boilers	Two Water Tube	
Armament	Twin three-inch guns	
	Triple-barrel anti-submarine mortars	
	Homing torpedoes	
Complement	160 officers and men/plus 50 trainees	
Cost	\$28,000,000. (approximately)	



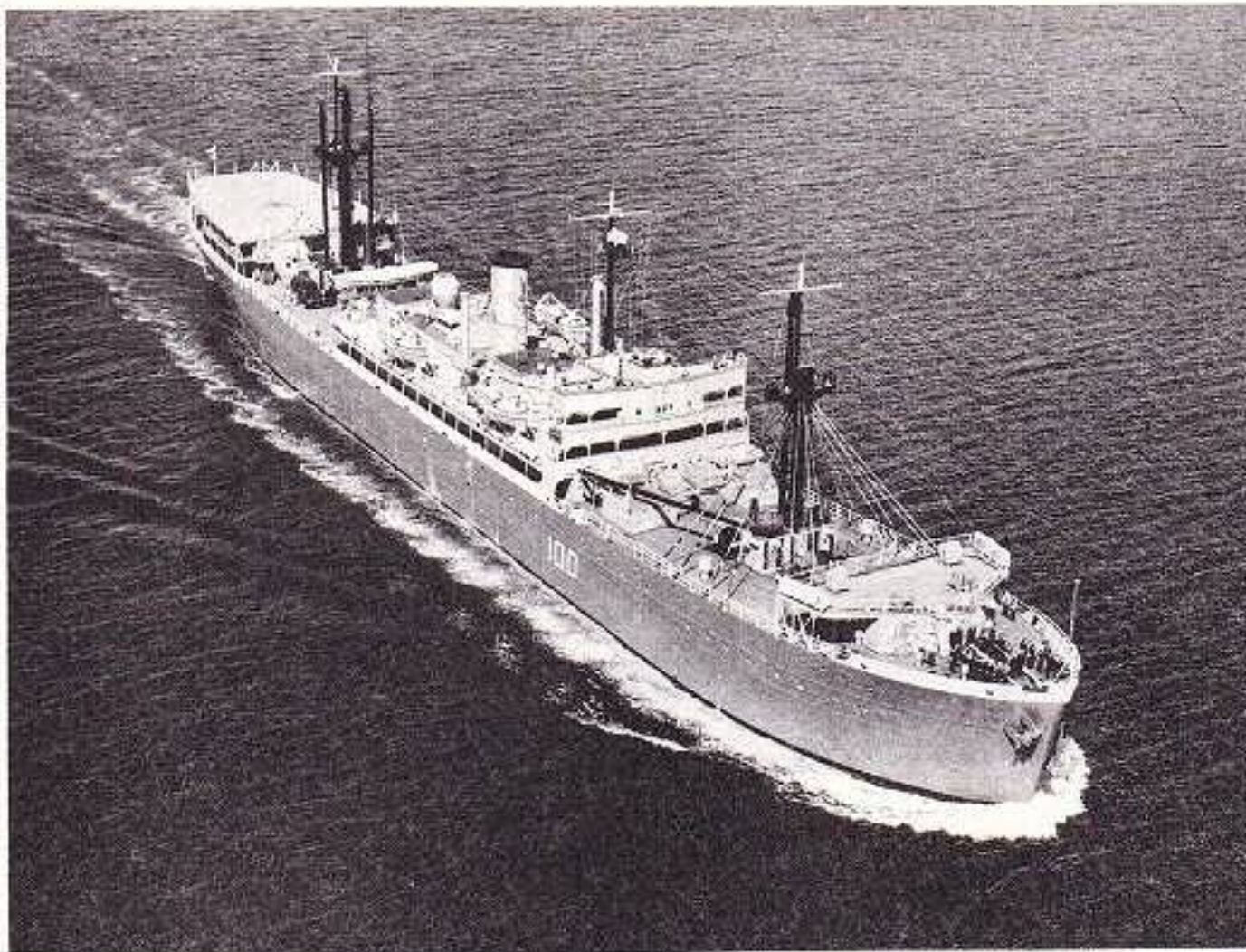
FLEET REPLENISHMENT SHIP

HMCS PROVIDER was built at Lauzon, Quebec, and commissioned for service on 28 September, 1963.

The PROVIDER with her facilities for furnishing mobile support enables units of the Fleet to operate for extended periods at sea. She can pump fuel oil to other ships at a rate of 1,500 tons per hour while steaming at speeds in excess of 18 knots.

She is equipped with the latest sonar, radio and navigational equipment, electro-hydraulic deck winches, a helicopter landing platform, hangar and repair facilities, and modern upper deck fuelling arrangements. She has 26 cargo tanks which hold 12,000 tons of fuel oil, 1,200 tons of diesel fuel, and 1,000 tons of aviation gasoline plus storage for spare parts, ammunition and 250 tons of food.

Displacement	22,700 tons (full load)	
Dimensions	length	555 feet
	beam	76 feet
	draught	32 feet
Machinery	Single screw, steam turbine	
Boilers	Water Tube automatically controlled	
Range	5,000 miles at 20 knots	
Complement	166 officers and men	
Cost	\$17,000,000.	



CAPE CLASS SUPPORT VESSELS

The Cape Class support vessels, the CAPE SCOTT and her sister ship, the CAPE BRETON, were built at Vancouver, BC., in 1944, and commissioned as escort maintenance ships in the Royal Navy.

The CAPE BRETON served in the Royal Navy as HMS FLAMBOROUGH HEAD. She also came back to Canada in 1951 and was converted at Halifax to be an apprentice training ship. In 1958, she sailed for the west coast and was refitted for the mobile repair role for the Pacific Command. She was paid off in Esquimalt in March, 1964, and is being held in reserve, although she still serves as an accommodation and repair ship in Esquimalt, in addition to her primary task of Fleet Maintenance Support. HMCS CAPE SCOTT is based at Halifax as the depot ship.

Displacement	standard	8,580 tons
	full load	11,270 tons
Dimensions	length	441 feet
	beam	57 feet
	draught	20 feet
Machinery	Triple expansion 1 shaft SHP 2,5000	
Speed	11 knots	
Boilers	Two Foster Wheeler	



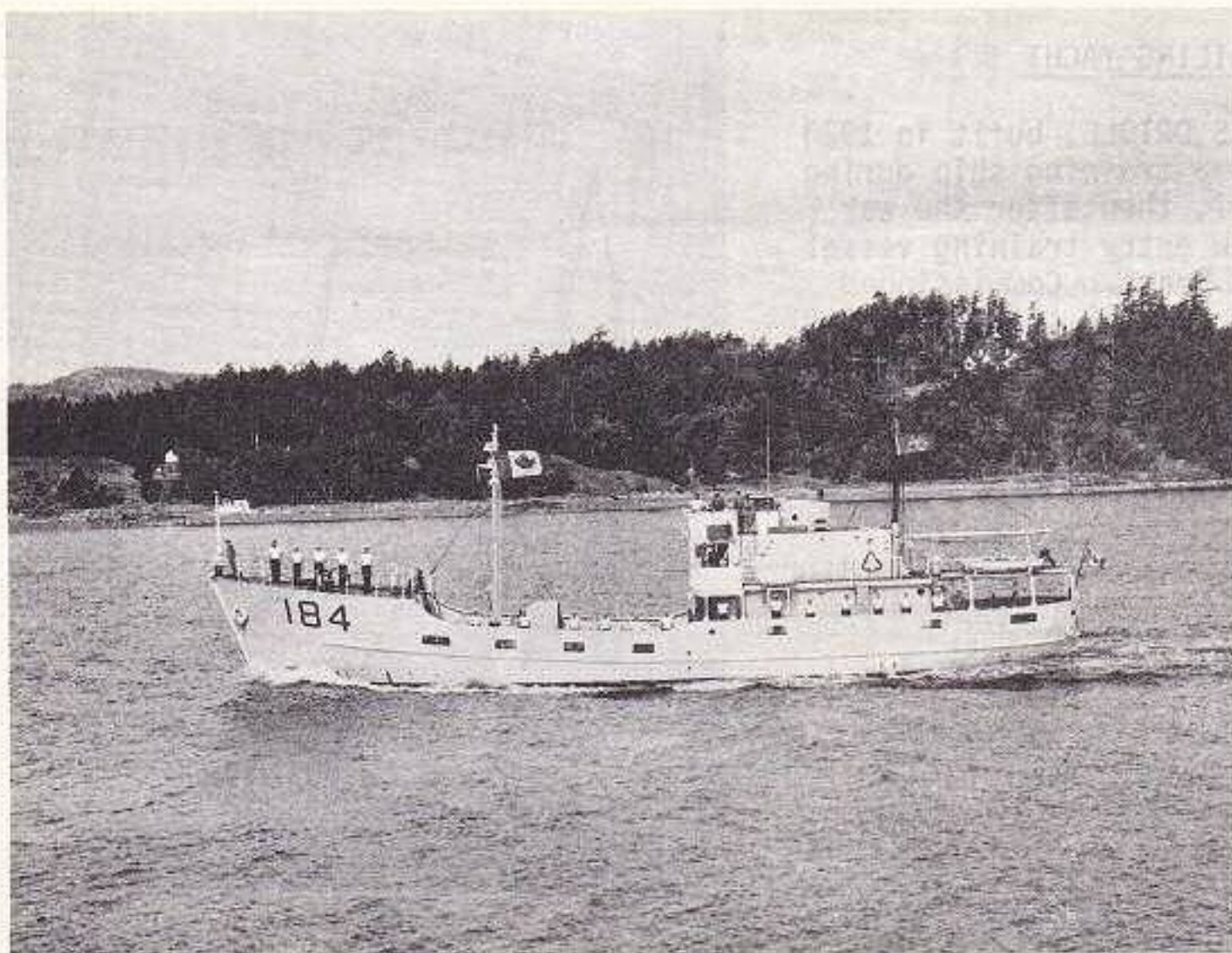
BAY CLASS TRAINING VESSELS

The Bay Class diesel-powered ships were designed and initially used for minesweeping training and operations. They have since had their minesweeping equipment removed and are now used as training vessels.

Completed in 1957 these ships have wooden hull planking on aluminum alloy framing and the superstructure is of aluminum alloy which provides a saving in top weight thus permitting for space for equipment and quarters.

Ships in this class are FUNDY (PFL 159), CHIGNECTO (PFL 160), THUNDER (PFL 161), COWICHAN (PFL 162), CHALEUR (PFL 164), and MIRAMICHI (PFL 163).

Displacement	deep	464 tons
Dimensions	length	152 feet
	beam	28 feet
	draught	8 feet
Machinery	Two General Motors V-12 diesels	
Speed	16 knots	
Complement	18 officers and men plus trainees	



PORTE CLASS GATE VESSELS

Of trawler design, the Porte Class Gate Vessels are multi-purpose vessels which can be used for operating gates in anti-submarine booms at harbour entrances, as fleet auxiliaries, as anti-submarine netlayers for entrances to defenced harbours, and can also be fitted with minesweeping gear. These ships are presently employed in training Reserve personnel.

Ships of this Class on the Pacific Coast are the PORTE DE LA REINE (YMG 184) and PORTE QUEBEC (YMG 185). On the Atlantic Coast is the PORTE ST. JEAN (YMG 180), the PORTE ST. LOUIS (YMG 183), and PORTE DAUPHINE (YMG 186).

Displacement		429 tons (full load)
Dimensions	length	125 feet
	beam	26 feet
	draught	13 feet
Speed		11 knots
Machinery		Diesel 600 B.H.P. Single Shaft
Complement		23 officers and men

TRAINING SAILING YACHT

HMCS ORIOLE, built in 1920 was used as a training ship during World War II, then after the war became a new entry training vessel on the East Coast. Commissioned HMCS ORIOLE in 1952 she sailed to Esquimalt to become the tender to HMCS VENTURE, the Navy's Officer Training establishment, and is still employed in cadet training.

Length	90 feet overall
Beam	19 feet
Draught	10.3 feet
Displacement	90 tons
Accommodations	24



RESEARCH VESSEL



Canadian Forces Auxiliary Vessel ENDEAVOUR (AGOR 171) was commissioned in 1965 for use by the Defence Research Establishment at Esquimalt.

Length	236 feet
Beam	38.6 feet
Draught	13 feet
Displacement	1,560 tons
Machinery	Two diesel electric motors

Her sister ship on the East Coast is Canadian Forces Auxiliary Vessel QUEST.

MARITIME FORCES PACIFIC

AIRCRAFT



CFB COMOX





HISTORY OF CANADIAN FORCES BASE COMOX

Canadian Forces Base Comox was opened as a Royal Air Force Base in 1942 and in 1944 came under Royal Canadian Air Force control. It was a coastal command establishment until 1946 at which time the Base was closed and placed on a care and maintenance program.

In 1952 the Base was re-opened as a host to 407 Maritime Patrol Squadron, which was then equipped with the Lancaster bomber. In 1954, 409 Squadron arrived with its CF 100s. In 1964, 121 KU, equipped with Albatross, Labrador and Dakota aircraft, arrived at the Base. In 1974, VU 33 Squadron, flying Trackers and T 33s arrived to complete the complement of Squadrons on Base.

Today, Canadian Forces Base Comox is still home for these four Squadrons. 407 Squadron now flies the Argus, and these aircraft are a familiar sight in the farthest reaches of the Pacific and in the Canadian North. 409 Squadron is now equipped with the CF 101B Voodoo interceptor, which provides this country's anti-bomber defences. 121 KU, which has now been renamed 442 Squadron, flies Buffalo and Labrador aircraft in fulfilling its search and rescue role. Additionally, the Squadron has a transport responsibility for communication and supply of west coast units. VU 33 Squadron provides air support services to the Pacific Coast Fleet, besides doing fisheries protection patrols.

On 1 September, 1975, Canadian Forces Base Comox became a part of Air Command.



407 MARITIME PATROL SQUADRON - CL 28 ARGUS

Equipped with modern, highly sophisticated detection and armament systems, this four-engine plane can carry an offensive load of 8,000 pounds to a patrol area of 1,000 miles at sea, search an area 50,000 square miles and return to Base with sufficient fuel remaining for a diversion to an airfield as far as 500 miles away.

The Argus can perform a variety of roles, including mine-laying, long-range convoy escort, blockade enforcement, maritime search and rescue, emergency transport duties and sovereignty flights.

Length	128 feet 9½ inches	
Span	142 feet 3½ inches	
Height	38 feet 8 inches	
Weight	148,000 pounds (Maximum)	
Speed	200 knots - cruising 315 knots - maximum	
Power	Four 3700 HP Wright-Cyclone R 3350 Piston / EA 1 Turbo-compound engines	Engines
Crew	3 pilots, 3 navigators, 2 flight engineers, 7 observers	
Cost	\$4,050,000 each	
Range	3600 nautical miles	
Ceiling	20,000 feet	



442 SQUADRON CH 113 LABRADOR HELICOPTER

This helicopter was designed and produced by the Boeing Vertol Company for the Canadian Armed Forces search and rescue role.

This aircraft incorporates such features as a 750 IMP gallon fuel capacity for relatively long-range helicopter search and rescue operations; a 10,000 LB cargo hook for external loads; a back ramp for easy loading; a water tight hull for water landings; a rescue hoist; and special equipment for the rescue and care of survivors including a rescue belt, Billy Pugh net, Stokes litter, electric heating cups for the preparation of beverages.

Length - rotors turning	83 feet 4 inches
Maximum Gross Weight	21,400 pounds
Normal Mission Weight	19,000 pounds
Rotor diameter	50 feet
Speed	cruising 125 knots maximum 148 knots
Power	Two T 58 GE 8F turbine engines each producing 1350 shaft HP
Crew	3
Range	Maximum 690 miles - without fuel reserve
Ceiling	10,600 feet - hover
Cost	\$948,000 each



442 SQUADRON - DHC 5 BUFFALO

This medium transport aircraft produced by de Havilland Company was acquired in 1967 for its capability to be employed under all weather conditions in areas where short, rough, unprepared strips provide the only take-off and landing surface.

The Buffalo's rear loading capability and adjustable ramp facilities permit fast loading and unloading of bulky cargoes, vehicles and machinery.

Length	77 feet 3 inches
Span	99 feet
Height	28 feet 6 inches
Weight	38,000 pounds
Speed	260 MPH - cruising
Power	Two 2,850 HP General Electric T 64-10 Turbine engines
Crew	4
Payload	41 fully equipped troops or equipment
Range	1400 miles
Cost	\$1,776,000 each



VU 33 SQUADRON - CP 121 TRACKER MARITIME SURVEILLANCE

The "Tracker" was built by de Havilland Aircraft of Canada, Downsview, Ontario, under license from the Grumman Aircraft Engineering Corporation of the United States.

This twin-engine aircraft is used primarily for coastal surveillance, that is, fisheries protection and pollution control.

Length	42 feet
Span	69 feet
Weight	26,000 pounds - maximum
Speed	search 140 knots maximum 224 knots
Power	Two Wright 983C9HE1 nine cylinder air cooled radial; single speed supercharge
Equipment	Search radar, ECM and communications equipment
Crew	4
Range	1200 nautical miles
Ceiling	24,000 feet
Armament	2.75" rockets, bombs, depth bombs
Cost	\$1.2 million



VU 33 SQUADRON - T 33 SILVER STAR

This aircraft was acquired in 1951 and is now used mainly in the electronic warfare role. Until 1974, in its dual-seat configuration, it was used as a training aircraft for operation flying in advanced jet aircraft. It was replaced by the CF 5.

Length	37 feet 8 inches
Span	37 feet 7 inches (without tip tanks) 42 feet 5 inches (with tip tanks)
Height	11 feet 8 inches
Weight	16,800 pounds - maximum take-off
Speed	450 MPH - cruising 550 MPH - maximum
Power	One Rolls-Royce Nene engine
Ceiling	41,000 feet
Range	1,250 miles - maximum
Cost	\$165,000 each



MARITIME FORCES (ATLANTIC)

SHIPS & AIRCRAFT





DDH 280 CLASS HELICOPTER DESTROYERS

Destroyers in this class are the IROQUOIS (DDH 280), HURON (DDH 281), ATHABASKAN (DDH 282) AND ALGONQUIN (DDH 283). They are designed primarily as anti-submarine warfare vessels but with a vastly improved self-defence capability and an ability to support land operations.

Displacement	4,600 tons - deep
Dimensions	length 426 feet
	beam 50 feet
	draught 14 feet 6 inches
Machinery	Four gas turbines
Speed	Over 27 knots
Armament	Sea Sparrow anti-missile and anti-aircraft missile system. One five-inch anti-surface and anti-air gun. Anti-submarine mortars. Homing torpedoes
Complement	285 officers and men, and up to 30 trainees
Cost	\$63,000,000 approximately

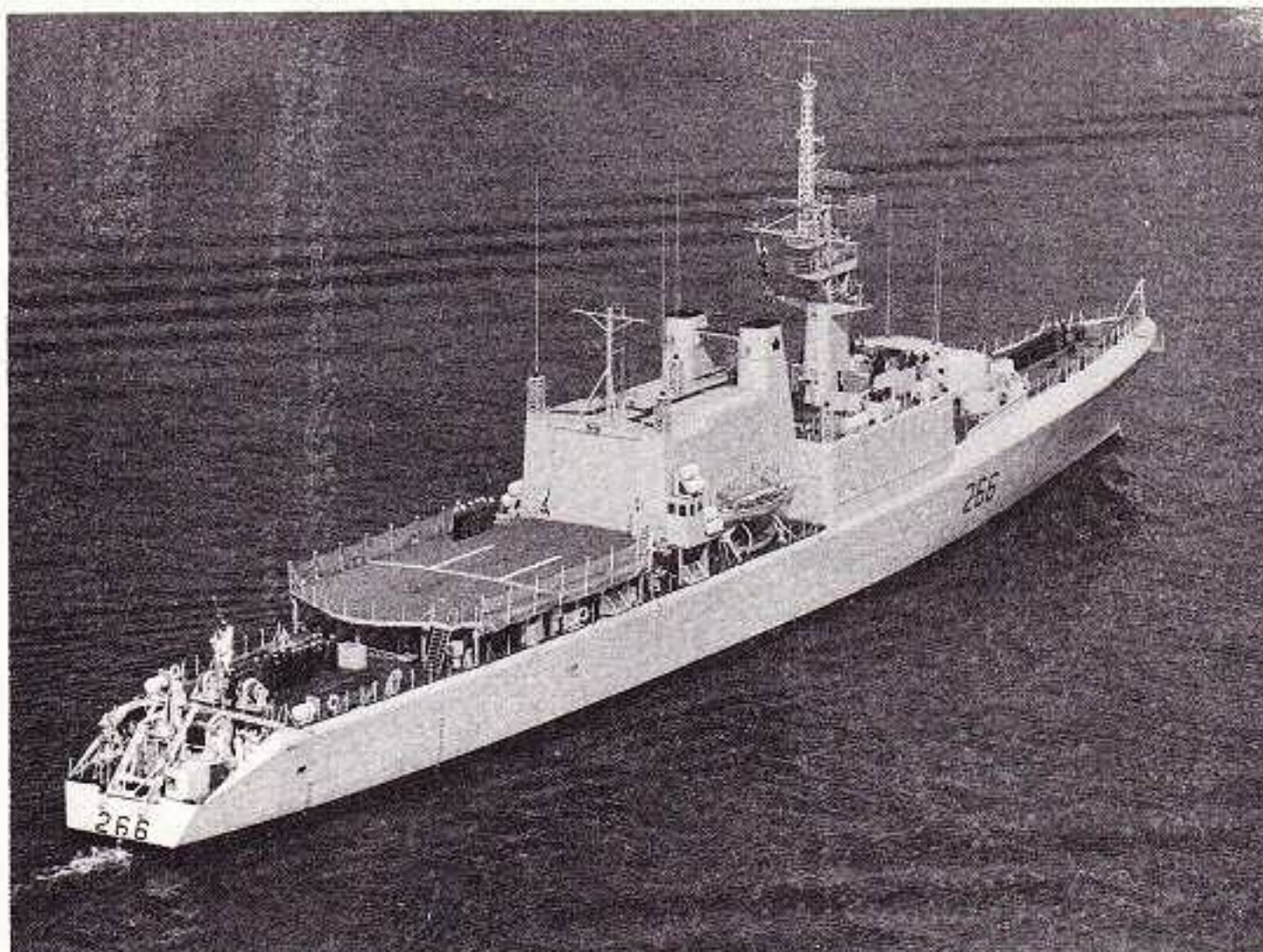


IMPROVED ST. LAURENT CLASS DESTROYER ESCORTS

This class of destroyer escort is equipped with modern detection apparatus and weapons for the hunting and killing of submarines. Their streamlined hulls make them especially suited to combat icing conditions in the North Atlantic, and facilitates the washing down of nuclear fallout.

Ships in service in this class are the SAGUENAY (DDH 206), SKEENA (DDH 207), OTTAWA (DDH 229), MARGAREE (DDH 230), FRASER (DDH 233) and ASSINIBOINE (DDH 234), and were all commissioned in either 1956 or 1957.

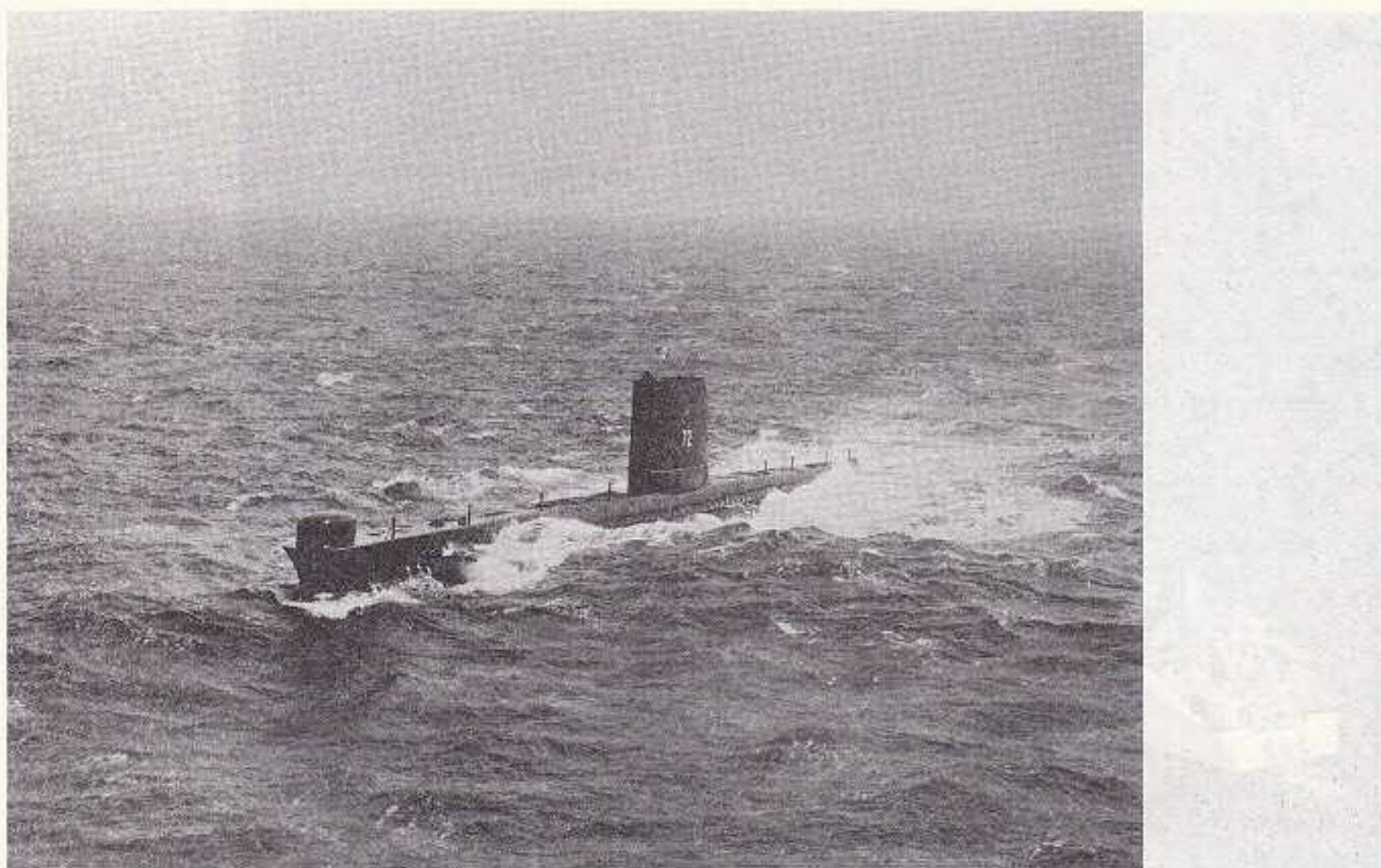
Displacement		2,858 tons - full load
Dimensions	length	366 feet
	beam	42 feet
	draught	13.2 feet
Machinery		Geared turbines - two shafts
Speed		Over 27 knots
Boilers		Two water tube
Armament		One twin three-inch gun
		Triple-barrel anti-submarine mortars
		Homing torpedoes
Complement		210 officers and men
Cost		\$25,120,000



ANNAPOLIS CLASS DESTROYER ESCORTS

The Annapolis class destroyer escorts ANNAPOLIS (DDH 265) and NIPIGON (DDH 266) are equipped with hangar and flight deck for operation of anti-submarine helicopters, as well as being fitted with the Canadian variable depth sonar system.

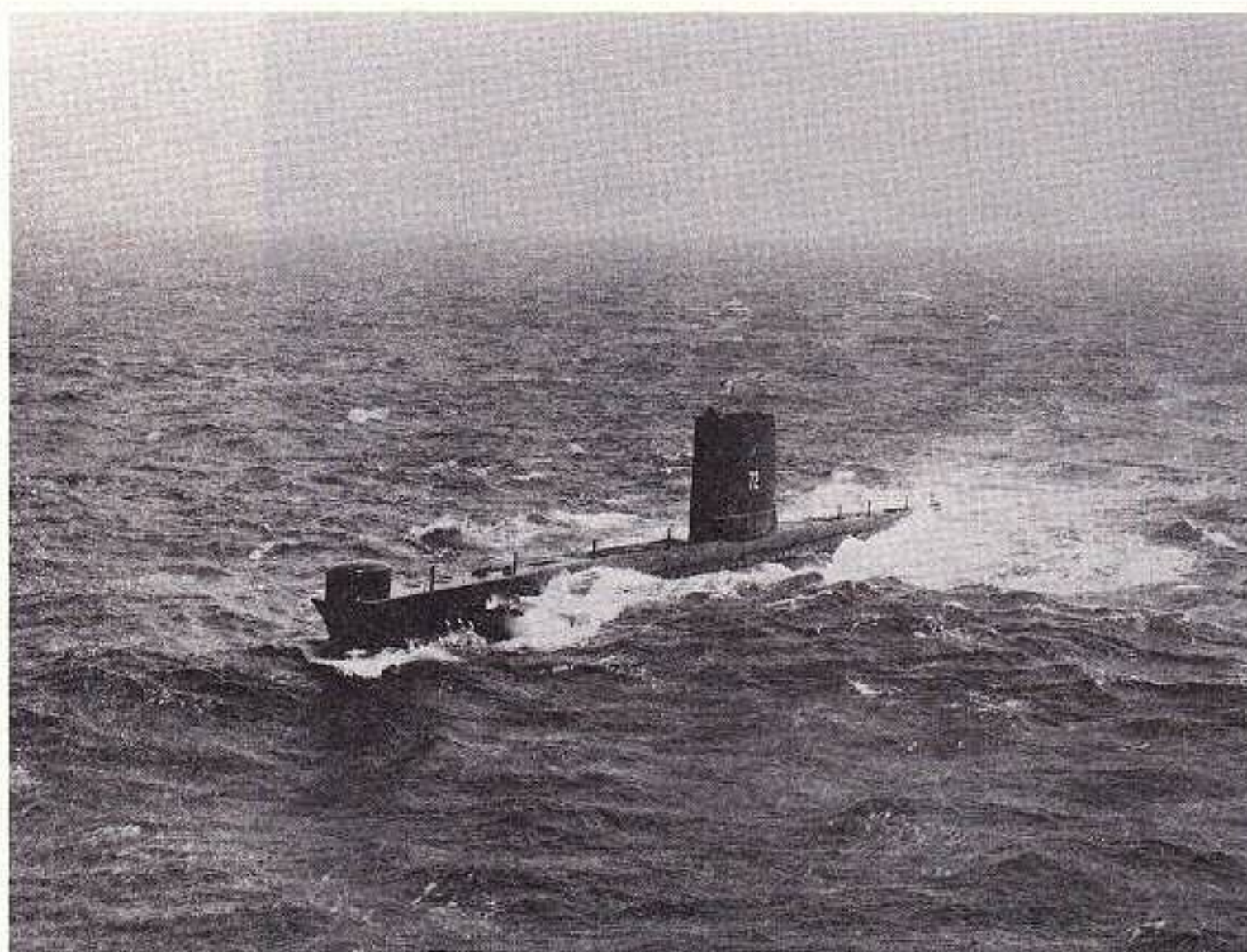
Displacement	2,858 tons - full load		
Dimensions	length	371 feet	
	beam	42 feet	
	draught	14.4 feet	
Machinery	Geared turbines - 30,000 SHP		
Speed	28 knots		
Boilers	Two water tube		
Armament	One twin-three inch gun		
	Triple-barrel, anti-submarine warfare mortar		
	Homing torpedoes		
Complement	210 officers and men		
Cost	\$31,000,000 each		



OBERON CLASS SUBMARINES

The "O" Class submarines OJIBWA (SS 72), ONONDAGA (SS 73), and OKANAGAN (SS 74) were commissioned in 1965, 1967 and 1968 respectively. They are diesel powered and fitted with modern detection equipment and armed with homing torpedoes.

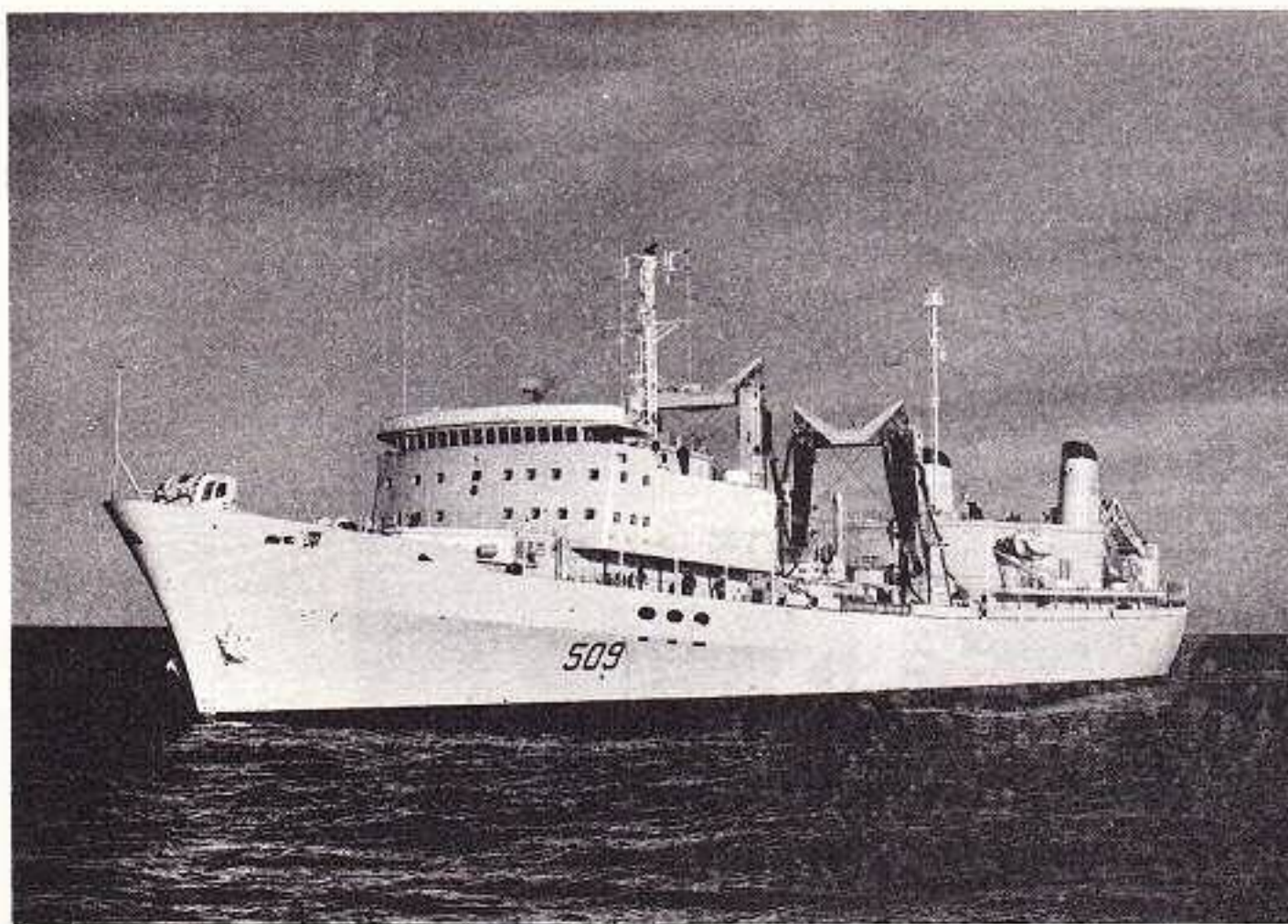
Displacement	standard	1,610 tons
	submerged	2,410 tons
	surfaced	2,030 tons
Dimensions	length	295 feet
	beam	26½ feet
	draught	18 feet
Armament	Eight 21-inch tubes for homing torpedoes	
Machinery	Admiralty standard range electric drive diesels	
Complement	6 officers and 59 men	



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Complement	6 officers and 59 men	



OPERATIONAL SUPPORT SHIPS

On the Atlantic Coast these ships are the PROTECTEUR and PRESERVER; on the Pacific Coast it is the PROVIDER. The Atlantic support ships were built in St. John, New Brunswick, and commissioned in 1969.

These ships greatly increase the anti-submarine warfare capability by enabling ships to remain on station longer. In addition, these ships are able to sealift a variety of land vehicles and helicopters.

Characteristics of PROTECTEUR (AOR 509) and PRESERVER (AOR 510)

Displacement		23,000 tons - full load
Dimensions	length	546 feet
	beam	76 feet
	draught	30 feet
Machinery		Single screw, steam turbine water tube automatic control
Range		4,100 miles
Speed		20 knots
Complement		227 officers and men
Cost		\$30,000,000



CH 124 (SEA KING) ANTI-SUBMARINE HELICOPTER

The Sea King is the Canadian Armed Forces only sea-going helicopter. This all-weather, day-and-night helicopter with a tail-folding device, winch-down equipment, a hull-shaped fuselage, high speed and automatic hovering capacity, is carried aboard a number of Maritime Command destroyers primarily in an anti-submarine warfare (ASW) capacity. Its detection, navigation and weapons systems enable it to search for, locate and destroy the submarine.

With its ASW equipment removed, this aircraft can carry up to 25 troops or 4,000 pounds externally suspended from its winch.

Length	54 feet 9 inches
Width	7 feet 1 inch
Height	16 feet 8 inches
Weight	19,100 pounds - maximum
Speed	<div>cruising</div> <div>maximum</div> <div>120 knots</div> <div>144 knots</div>
Power	2 GE twin turbines
Crew	4 - 2 pilots 2 sonarmen
ASW endurance	4 hours or 500 miles
Detection Equipment	Sonar-ranging set and selfcontained navigation system
Armament	Homing torpedoes and depth bombs
Cost	\$2,100,000 each



RESEARCH, PRESENTATION AND COLLECTION OF PHOTOGRAPHS

BY

MR. F.D.H. NELSON

Base Historical Committee

Canadian Forces Base Esquimalt