



**THE COMMISSIONING
OF
HMCS OKANAGAN**

22 JUNE, 1968

IN HER MAJESTY'S DOCKYARD, CHATHAM, KENT, ENGLAND

THE COMMISSIONING OF
HMCS OKANAGAN

On the occasion of her commissioning it is my sincere pleasure to extend a warm welcome to HMCS Okanagan on behalf of the Government and people of Canada.

As the Okanagan now prepares to take her place with her two sister Oberon class submarines already serving in Maritime Command at Halifax, she begins an important role in helping to meet Canada's anti-submarine commitments.

These commitments are being carried out by the ships and aircraft of Maritime Command who form our nation's anti-submarine team. Through this team, manned by dedicated young men, Canada has made significant contributions to the highly specialized field of anti-submarine warfare.

The Okanagan and her crew are a product of this team. They now face long hours of hard work to achieve the standard demanded of them to meet the training and operational duties which they will be called upon to perform. I am confident the Okanagan will do her job well.

To all who have assisted in the designing and building of this submarine, and to those who will sail her, I extend sincere thanks and good wishes.

A handwritten signature in black ink, appearing to read "Lester B. Pearson".

MINISTER OF
NATIONAL DEFENCE

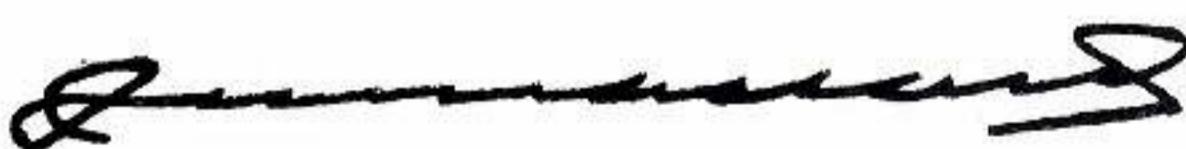
The commissioning of HMCS Okanagan marks the addition to the fleet of the last of the three Oberon class submarines ordered for service in Maritime Command. Her predecessors already serving are the Ojibwa and the Onondaga. Also, although not of the Oberon class, the submarine Grilse is serving the Maritime Command at Esquimalt, B.C.

The Okanagan will arrive in Halifax later this year where she will join the First Canadian Submarine Squadron. As a member of this squadron she will be called upon to undertake important training and operational roles with other units of the fleet.

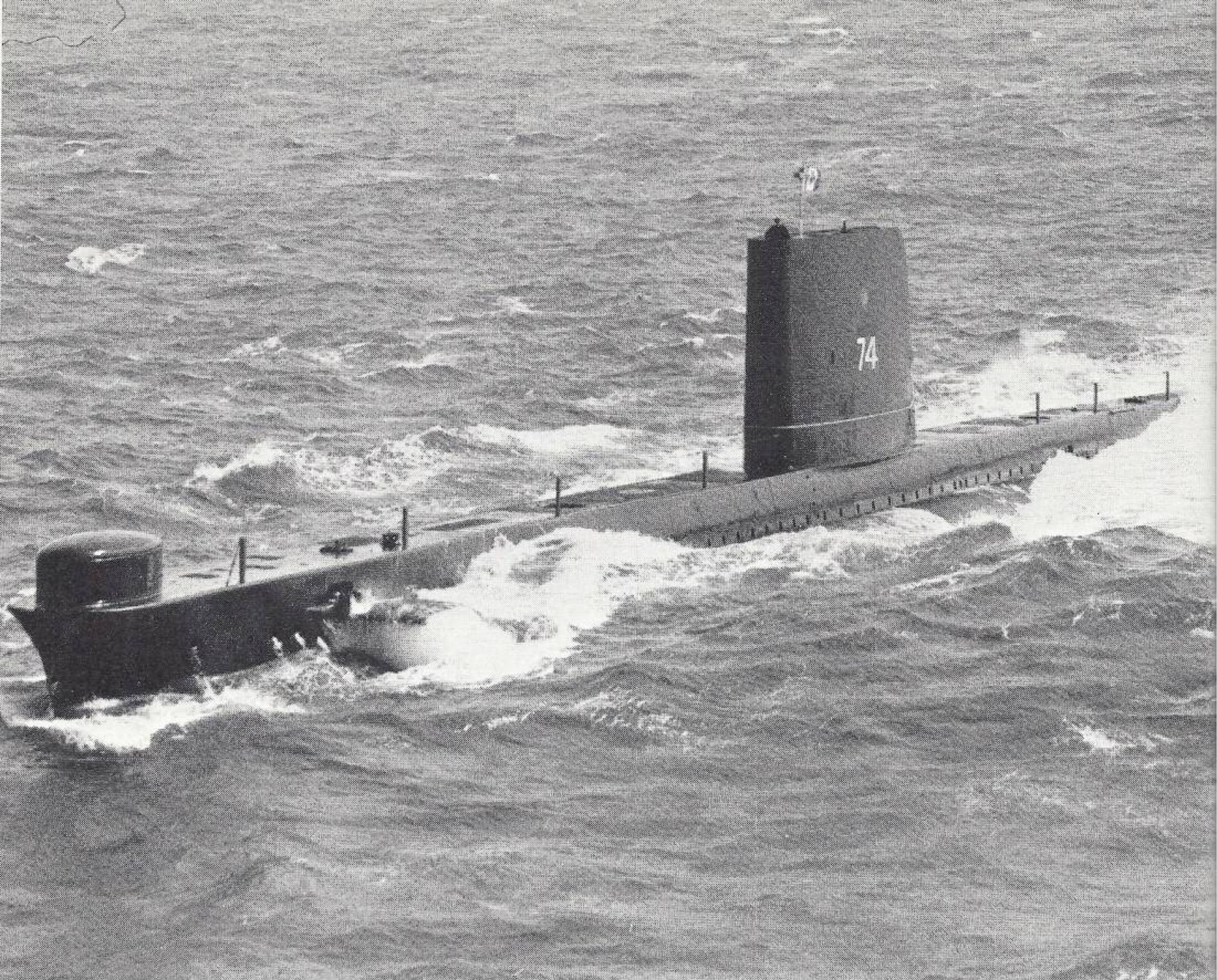
These tasks will be demanding on both the Okanagan and her crew. I have no doubt she will continue to maintain the high standards already established in Maritime Command.

It is my pleasure to welcome the Okanagan and to extend thanks to those responsible for her design and construction. To her commanding officer, officers and men on this, the Okanagan's first commission, I extend sincere best wishes from the Defence Staff and the officers, men and women of the Canadian Armed Forces.

Good luck and smooth sailing.



GENERAL
CHIEF OF THE DEFENCE STAFF



THE SUBMARINE

HMCS Okanagan, the last of three Oberon class submarines built for the Maritime Command of the Canadian Armed Forces embodies all the improvements suggested by experience with previous ships of the class, and by continuing research into the techniques of anti-submarine warfare. She is capable of cruising for long periods at depth, and of bursts of high underwater speed. She has a wide range of equipment to increase her detection capability, and she packs an impressive punch.

CONSTRUCTION

The Okanagan's hull has been designed to withstand pressure at great depths, and to travel at high speeds without generating noise that would betray her to a vigilant enemy. The hull was constructed by unit prefabrication, which permitted the building of the ship in sections and afforded maximum control of all phases of the work.

Much thought and ingenuity have been devoted to using every scrap of space to maximum advantage. The 295 feet of the Okanagan's length will be packed with complex equipment that must all be accessible and situated for the best performance of its functions.

WEAPONS

The Okanagan has six bow tubes capable of firing either diesel or electrically propelled torpedoes. Two tubes at the stern fire electric torpedoes only. Spare torpedoes are stowed in both torpedo rooms.

PROPELLION

The main propulsion plant comprises two diesel-generator combinations and two large storage batteries. The generators and batteries, separately or in combination, drive the motors that propel the submarine.

Each engine-generator combination consists of a 16-cylinder V-construction diesel engine of the Admiralty Standard Range, driving an English Electric 1280 KW generator. The engines, rated at 1840 BHP maximum (supercharged surface), were designed and built at Chatham.

The main storage batteries, manufactured by Chloride Batteries Limited, consist of two 224-cell groups. These in turn are divided into two sections of 112 cells, which can be operated separately, in series, in series-parallel, or in parallel, to give a wide spread of power ranges for the motors.

The double-armature main motors, manufactured by English Electric, produce 3000 horse-power per shaft.

AUXILIARY MACHINERY

A Caird and Rayner distilling plant in the generator room produces 20 to 25 gallons of fresh water per hour for domestic use and for the main storage batteries.

Two 4-stage Reavell air compressors, also in the generator room, produce the high-pressure air to operate the air systems. This air is stored in five main accumulator groups, one outside the pressure hull and the others inside the submarine. It is used for blowing the main ballast tanks, and also supplies the interior service air system. A low pressure blower in the auxiliary machinery space provides the large volume of air required to complete the blowing of the main ballast tanks after surfacing.

The high capacity air conditioning plant in the auxiliary machinery space operates in conjunction with spot coolers in all the compartments. In the same space is a freon refrigeration unit for the cold and cool rooms.

Two pumps supply the hydraulic system through two accumulators. This system operates main vents, exhaust valves, snort masts, periscopes, steering gear and hydroplanes.

ELECTRICAL EQUIPMENT

The electrical and electronic systems are complex. There are two of each of the following types of motor-generators: 100 KW; 15 KVA, 115V, 60-cycle, 3-phase; 15 KVA, 200-volt, 400-cycle, 3-phase. Several smaller motor generators supply special services, such as the gyro compass and the fire control systems.

ELECTRONICS

The Okanagan has radio equipment for transmitting and receiving over a wide range of frequencies. She has five different sonars, all capable of passive listening and one able to make transmissions. There are three underwater telephones, two of which are for escape purposes. The navigational and warning radar antennae are on a retractable mast, and may be used on the surface or at periscope depth. One periscope has an antenna that enables radar ranges to be taken while only the periscope is exposed.

HABITABILITY

A great and sustained effort has been made to provide the best living and working conditions possible, both in designing the whole submarine to make the maximum space available for her crew, and in providing equipment and services to ensure their health and comfort. Particular effort has gone into the improvement of air conditioning, sanitation and waste-disposal.

Accommodation consists of the commanding officer's cabin, an improved wardroom, for seven officers, with an optionally separated sleeping area, chiefs' and petty officers' bunk spaces and crews sleeping areas forward and aft.

The re-setting, forward, of the all-electric stainless steel galley has made possible the introduction of cafeteria style of messing. The compact equipment can provide meals that compare favourably with those in surface ships.

Arrangements for recreation include a library, a movie projector and a tape recorder.

PROVISIONS

There is refrigerated and dry storage space for a 90-day supply of provisions, and the submarine can be self-sufficient in food, water and fuel for several weeks on patrol at a stretch.

SAFETY

The ship's company of HMCS Okanagan has been trained in one-man escape technique. Emergency escape arrangements including one-man escape chambers and indicator buoys are fitted at both ends of the submarine. A messenger buoy for use in the diving bell method of escape is fitted forward.



Back row standing (from left to right): Lt.-Cdr. R. D. Mitchell, Lt.-Cdr. P. S. P. Muir, Lt. J. R. McFarlane, Lt.-Cdr. P. A. Kirk, Lt.-Cdr. G. A. Kastner, LS R. B. Robertson.

Front row seated (from left to right): Mrs. E. P. Delaney, Cdr. D. E. Galbraith, Miss J. C. Masters.

CANADIAN NAVAL SUBMARINE TECHNICAL REPRESENTATIVE

During the building of the three "O" class submarines for the Canadian Armed Forces, the Canadian Naval Submarine Technical Representative (CANAVENTREP), was responsible for technical and contractual matters on behalf of Canadian Forces Headquarters and the Canadian Department of Defence Production. Commander D. E. Galbraith, RCN, and his specialist staff officers worked in direct liaison with dockyard authorities and the Ministry of Defence (Navy) in the detailed interpretation of Canadian requirements and in the implementation of successive design changes. Members of the team represent the Canadian Armed Forces at all trials, tests and inspections.

CANAVENTREP was also responsible for providing information necessary for the development of maintenance facilities and logistic support in Canada, and for acquiring technical data required for planning refits of the submarines in Canadian dockyards.



Mr. M. C. Dunstan
RCNC, MRINA.
General Manager,
H.M. Dockyard, Chatham



Vice Admiral W. J. Parker
CB, OBE, DSC, RN.
Flag Officer, Medland and
Admiral Superintendent
H.M. Dockyard, Chatham



Mr. H. R. P. Chatten
MA, AMRINA, RCNC
Production Manager
H.M. Dockyard, Chatham

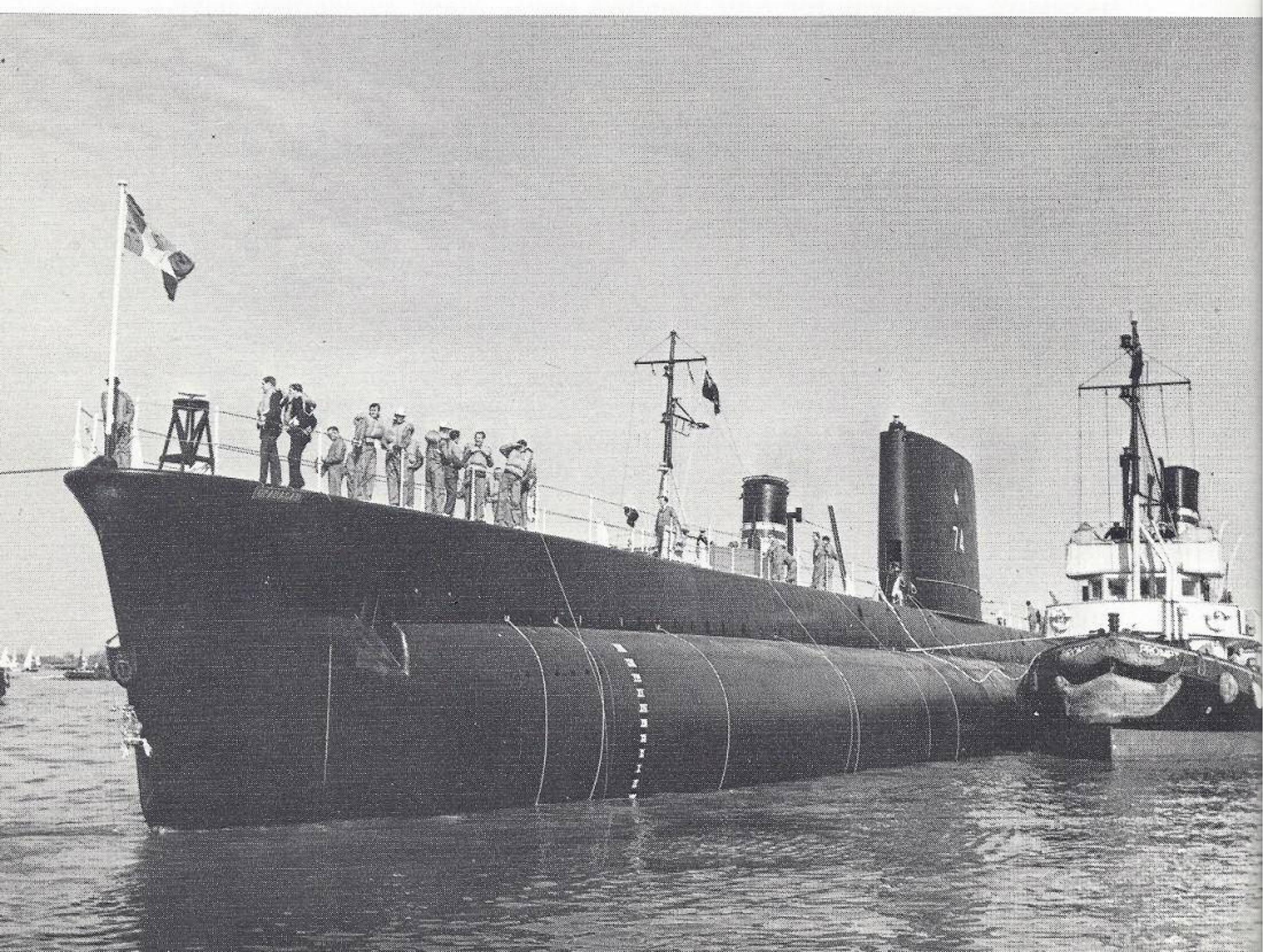
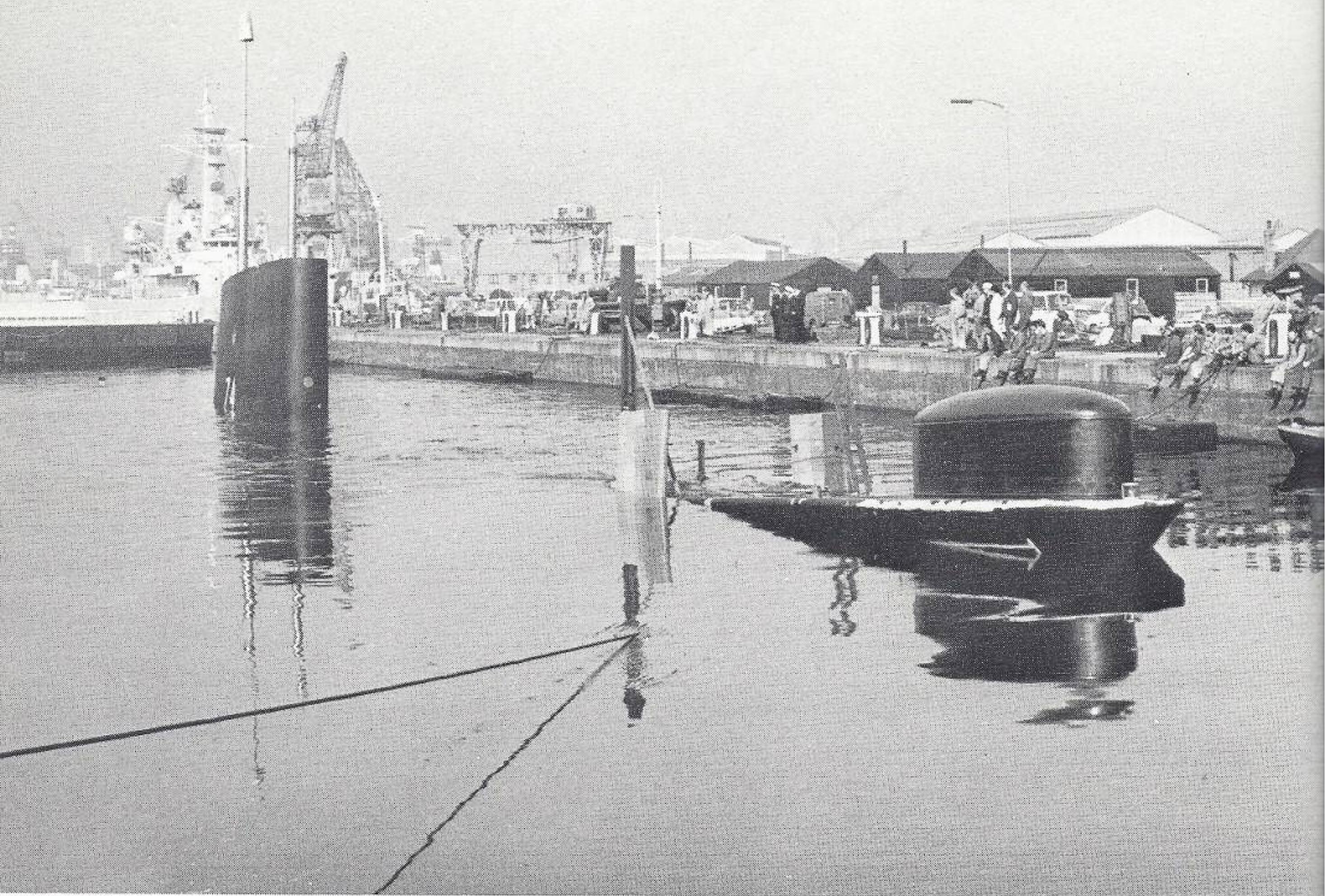
THE BUILDERS H.M. DOCKYARD, CHATHAM

Her Majesty's Dockyard at Chatham has been building ships for successive sovereigns for four hundred years. Many submarines have been built there since the first was launched in 1908, and Chatham is now one of the few yards in Britain specializing in this type of construction.

All this experience and research down the generations has culminated in a highly specialized team of naval architects and constructors, mechanical and electrical engineers, and many varieties of tradesmen capable of keeping Chatham in the forefront of technological advance. In evidence of this, Chatham Dockyard is already being equipped at top speed for the maintenance and refuelling of nuclear submarines.

Okanagan, the latest of the "Oberon" class and the third of that class to be built by Chatham for Canada, is the 57th submarine to be built in the yard. The men of Chatham also designed and built Okanagan's engines.

Okanagan will sail from Chatham carrying with her the goodwill and sincere wishes of all who have been concerned in conceiving and building her, and her crew will accept her with confidence from one of the finest teams of designers and builders to be found anywhere.



THE SHIP'S

COMPANY



LIEUTENANT-COMMANDER
NIGEL H. H. FRAWLEY
Commanding Officer

LIEUTENANT H. R. WADDELL	<i>Executive Officer</i>
LIEUTENANT R. GILLARD	<i>Engineering Officer</i>
LIEUTENANT G. S. HURFORD	<i>Assist. Eng. Officer</i>
LIEUTENANT R. W. MACKAY	<i>Operations Officer</i>
LIEUTENANT W. G. LUND	<i>Weapons Officer</i>
LIEUTENANT M. J. MILLER	<i>Navigating Officer</i>
SUB-LIEUTENANT M. G. DALZELL	<i>Additional</i>

CHIEF PETTY OFFICERS

W. R. Churcher
S. A. Jennings
F. Kramer
G. T. Webb
D. Hood

PETTY OFFICERS
W. E. Bruce
F. J. Chambers
R. L. Kaye
K. King
G. Pembroke
G. W. Sigrist
W. S. Davidson
D. R. Hogg

LEADING SEAMEN
G. J. Doutre
G. A. Gardner
C. H. Orr

J. L. Hood
A. R. Anthony
M. B. Ferguson
K. S. Irving
D. J. Payne
T. E. Goddard
D. H. Brown
L. Blagdon
W. Wilson
B. MacEachern
C. E. Montgomery
A. J. Whelan
W. Buckley
N. E. Pepper
K. Estabrook
T. H. Wyss
J. W. MacIntosh
W. P. Layden
P. C. Renner
K. G. Pennington

T. McVarnock
T. G. Griffin
E. D. Sadler
J. Conway
J. R. Miziuk
J. W. White

ABLE SEAMEN
C. W. Harris
P. C. Smith
V. Carter
J. R. Hollohan
A. L. Lovasi
D. G. Anderson
D. F. Cameron
M. R. Wood
G. Dingman
F. Childs
D. Brannen
T. Yeo
L. Pearce

THE COMMISSIONING CEREMONY

Introduction by COMMANDER D. E. GALBRAITH, CD, Canadian Naval Submarine Technical Representative, Chatham.

Address by REAR ADMIRAL J. C. O'BRIEN, CD, Commander, Maritime Command.

Address by the Guest of Honour, HIS EXCELLENCY CHARLES S. A. RITCHIE, High Commissioner for Canada.

*Transfer of the submarine to the Canadian Armed Forces by VICE ADMIRAL W. J. PARKER, CB, OBE, DSC, RN,
Flag Officer, Medway, and Admiral Superintendent, HM Dockyard, Chatham.*

Acceptance of the submarine by COMMODORE A. GRAHAM BRIDGMAN, CD, Director General Maritime Systems, Canadian Forces Headquarters.

THE COMMISSIONING SERVICE

Conducted by CAPTAIN (N) THE REVEREND CANON E. SIGSTON, C.D.

And *J.P. Belanger*
Brethren, seeing that in the course of our duty, we are set in the midst of many and great dangers, and that we cannot be faithful to the high trust placed in us without the help of Almighty God, let us unite our prayers and praises in seeking God's blessing upon this ship and all who serve in her, that she may sail safely under God's good providence and protection.

HYMN: (To the tune Melita)

O Father, King of Earth and Sea,
We dedicate this ship to Thee;
In faith we send her on her way,
In faith to Thee we humbly pray,—
O hear from Heaven our sailors' cry,
And watch and guard her from on high.

And when at length her course is run,
Her work for home and country done;
Of all the souls that in her sailed,
Let not one life in Thee have failed;
But hear from Heaven our sailors' cry,
And grant eternal life on high.

AMEN.

Then shall the Captain of HMCS Okanagan say to his ship's company in the words of "The Gaelic Blessing":

THE GAELIC BLESSING

I call upon you to pray for God's blessing on this ship. May God the Father bless her.

Ship's Company: Bless our ship.

Captain: May Jesus Christ bless her.

Ship's Company: Bless our ship.

Captain: May the Holy Spirit bless her.

Ship's Company: Bless our ship.

Captain: What do ye fear seeing that God the Father is with you?

Ship's Company: We fear nothing.

Captain: What do ye fear seeing that God the Son is with you?

Ship's Company: We fear nothing.

Captain: What do ye fear seeing that God the Holy Spirit is with you?

Ship's Company: We fear nothing.

PSALM 107 (VERSES 23 TO 31, 43)

They that go down to the sea in ships, that do business in great waters;

These see the works of the Lord, and His wonders in the deep.

For he commandeth, and raiseth the stormy wind, which lifteth up the waves thereof.

They mount up to the Heavens, they go down again to the depths; their soul is melted because of trouble.

They reel to and fro, and stagger like a drunken man, and are at their wit's end.

Then they cry unto the Lord in their trouble, and He bringeth them out of their distresses.

He maketh the storm a calm, so that the waves thereof are still.

Then are they glad because they be quiet; so He bringeth them unto their desired haven.

Oh that men would praise the Lord for His goodness, and for His wonderful works to the children of men!

Whoso is wise, and will observe these things, even they shall understand the loving-kindness of the Lord.

Glory be to the Father, and to the Son, and to the Holy Ghost;
As it was in the beginning, is now,
And ever shall be, world without end.

AMEN.

THE PRAYERS

O Thou that sittest above the water floods, and stillest the raging of the sea, accept, we beseech thee, the supplications of Thy servants for all who in this ship, now and hereafter, shall commit their lives unto the perils of the deep. In all their way, enable them truly and godly to serve Thee, and by their Christian lives to set forth Thy glory throughout the earth. Watch over them in their going forth and their coming in, that no evil befall them, nor mischief come nigh to hurt their souls. And so through the waves of this troublesome world, and through all the changes and chances of their mortal life, bring them of Thy mercy to the sure haven of Thine everlasting Kingdom; through Jesus Christ Our Lord. AMEN.

THE NAVAL PRAYER

O Eternal Lord God, who alone spreadest out the heavens, and rulest the raging of the sea; who has compassed the waters with bounds until day and night come to an end; be pleased to receive into Thy Almighty and most gracious protection the persons of us Thy servants, and the Fleet in which we serve. Preserve us from the dangers of the sea, and from the violence of the enemy; that we may be a safeguard unto our most gracious sovereign Lady, Queen Elizabeth, and her Dominions, and a security for such as pass on the seas upon their lawful occasions; that the inhabitants of our Commonwealth may in peace and quietness serve Thee our God; and that we may return in safety to enjoy the blessings of the land, with the fruits of our labours, and with a thankful remembrance of Thy mercies to praise and glorify Thy Holy Name; through Jesus Christ our Lord. AMEN.

THE LORD'S PRAYER

Our Father, Who art in Heaven, hallowed be Thy name; Thy kingdom come; Thy will be done; in earth as it is in Heaven. Give us this day our daily bread. And forgive us our trespasses, as we forgive them that trespass against us. And lead us not into temptation; but deliver us from evil; for Thine is the kingdom, the power, and the glory for ever and ever. AMEN.

THE BENEDICTION

Conducted by Cdr. The Rev. J. P. Belanger, C.D.

BLESSING THE SHIP

- V. Our help is in the name of the Lord.
- R. Who made heaven and earth.
- V. The Lord be with you.
- R. And with your spirit.

Let us pray.

Almighty God, our heavenly Father, hear our prayers and bless this ship with Thy right hand as Thou didst bless Noah and the ark on the waters of the flood. Send Thy holy angels from heaven to guard, assist, strengthen and encourage those who will serve therein. Preserve and deliver them from all weakness of mind and body. Endow her Officers with the spirit of wisdom, knowledge and the fear of Thee, inspire her men with the spirit of truth, courage and loyalty. Strengthen and increase their admiration for honest dealing, so that they may hate that which is evil and love that which is good. That through them the tradition of the Navy of Her Majesty the Queen may be maintained, to ensure the freedom of the seas to all who have the right to use them. And under the patronage of the blessed Mother of God, Mary, Star of the sea, of St. George Thy Martyr, and of all Thy saints, may their words and works be such as to bring them the honour due to faithful servants in this Life, and an eternal reward in the Life to come. Thou who livest and reignest world without end. AMEN.

PRAYER FOR SAILORS (to St. Brendan)

St. Brendan, named "Patron of Seafarers," helped those who fight our battles on the waters. You were fittingly called "God's Voyager," because you spread His Gospel by long and dangerous voyages and gave that Gospel of salvation to many. As Our Fathers were brought through the Red Sea and carried in safety through the overflowing waters, so grant that through your intercession our sailors, and those who guard our nation's coasts may be preserved from all dangers of the sea, may be protected on their course and come safely into port. AMEN.

Prions.

Seigneur, exaucez nos prières et dans votre bonté, accompagnez les membres de cet équipage dans toutes leurs entreprises. Comme vous êtes partout, comblez-les de votre miséricorde en tous lieux. Qu'après avoir été protégés par votre assistance contre toute adversité ils vous en rendent grâces. Par le Christ Notre-Seigneur.

Dieu tout-puissant et éternel, vous disposez de notre temps et de notre vie. Accordez à vos serviteurs le bienfait d'une tranquillité continue et mettez en sûreté, sous votre protection, ceux que vous avez rendus sains et saufs dans leurs travaux. Par le Christ Notre-Seigneur. AMEN.



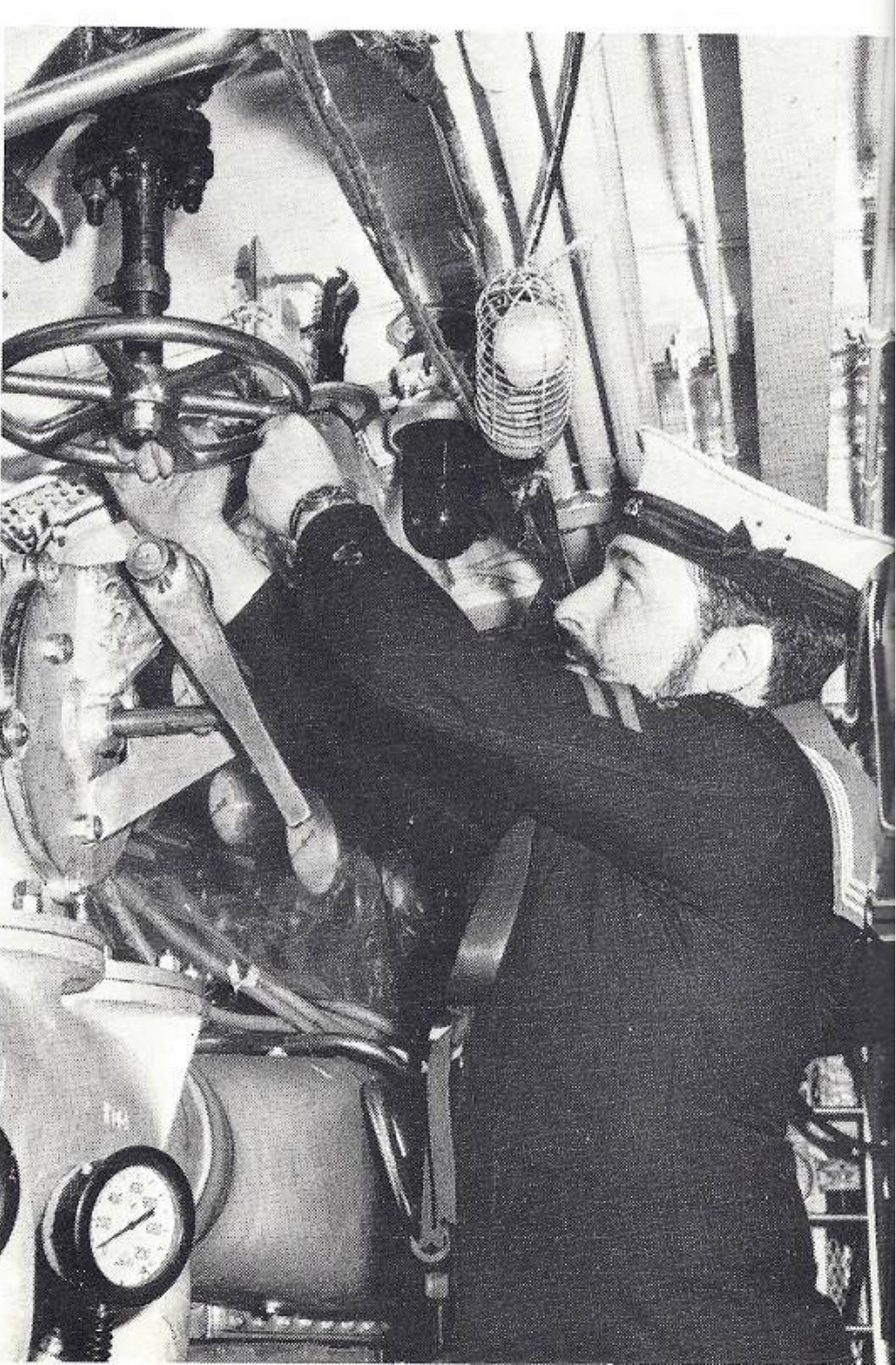
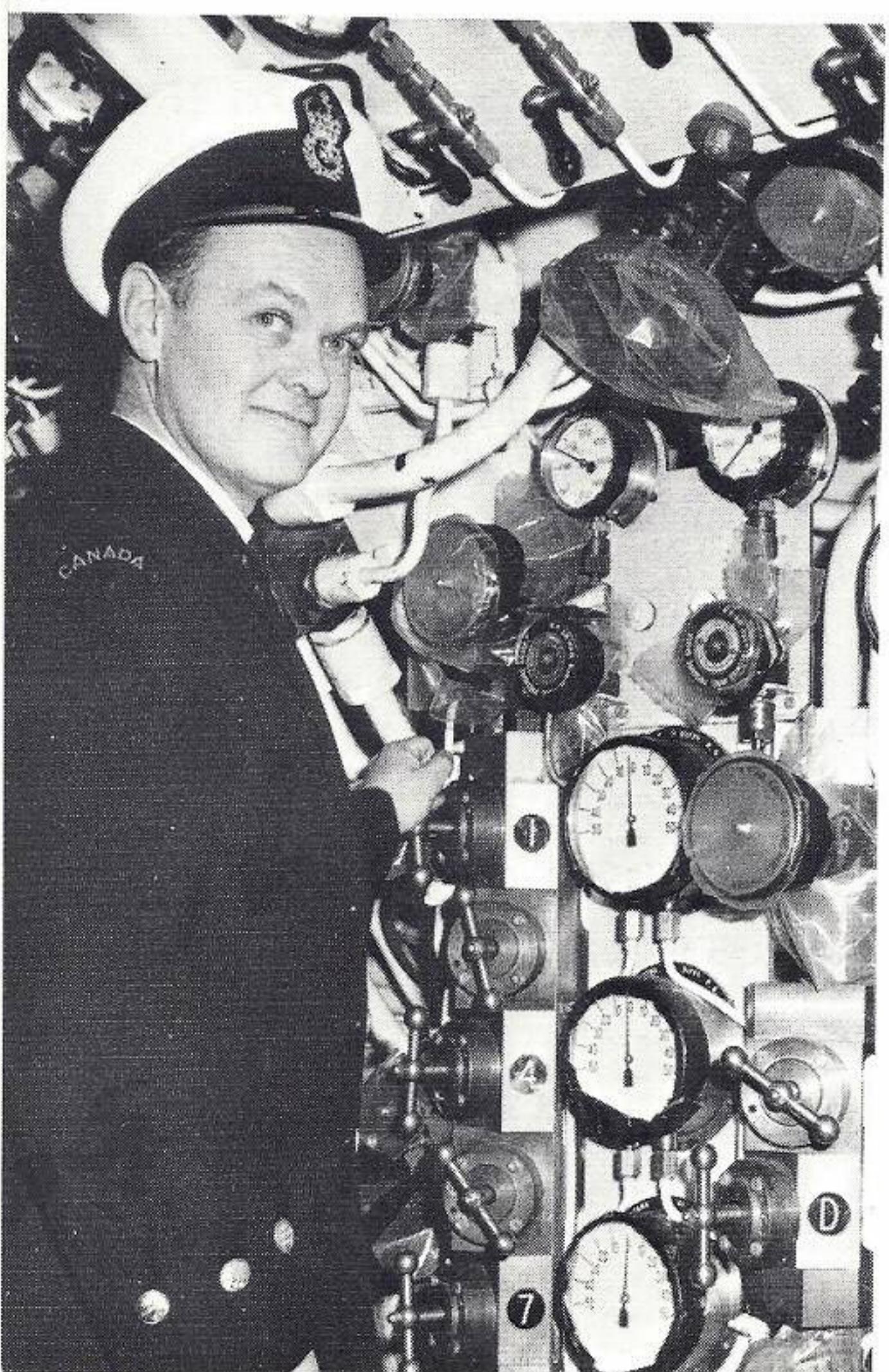
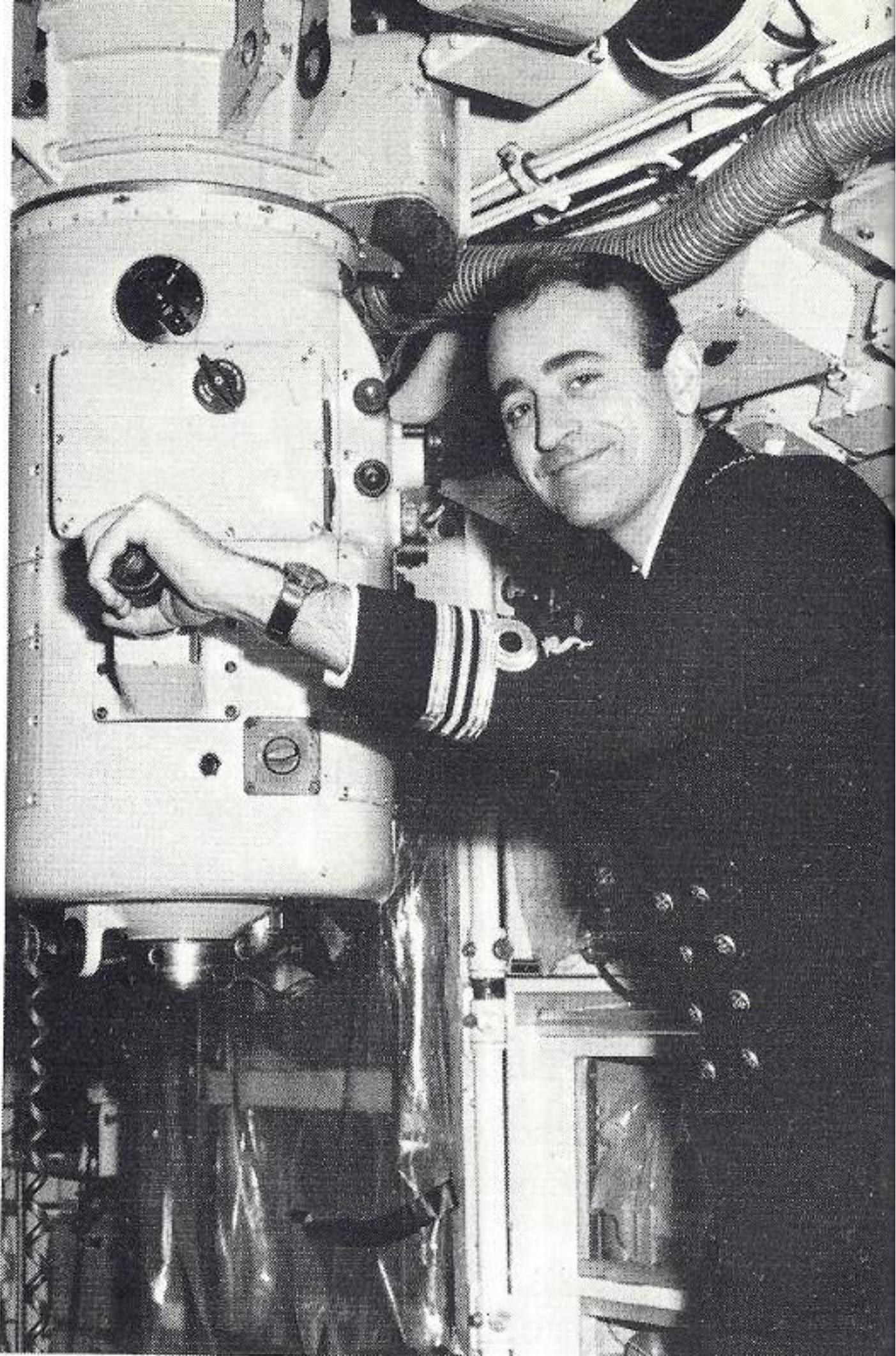
Her Majesty's Canadian Ship Okanagan Commissions.

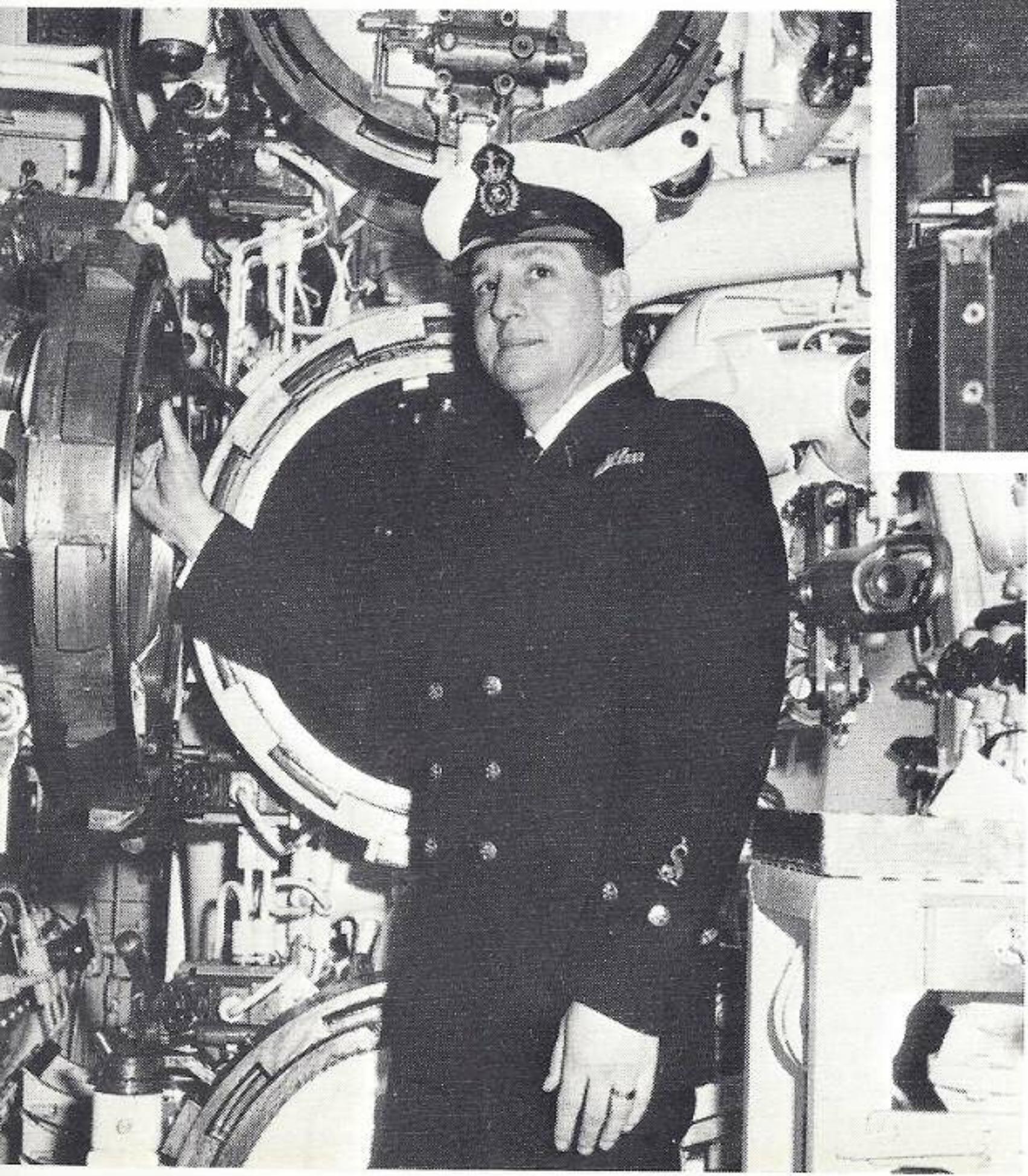
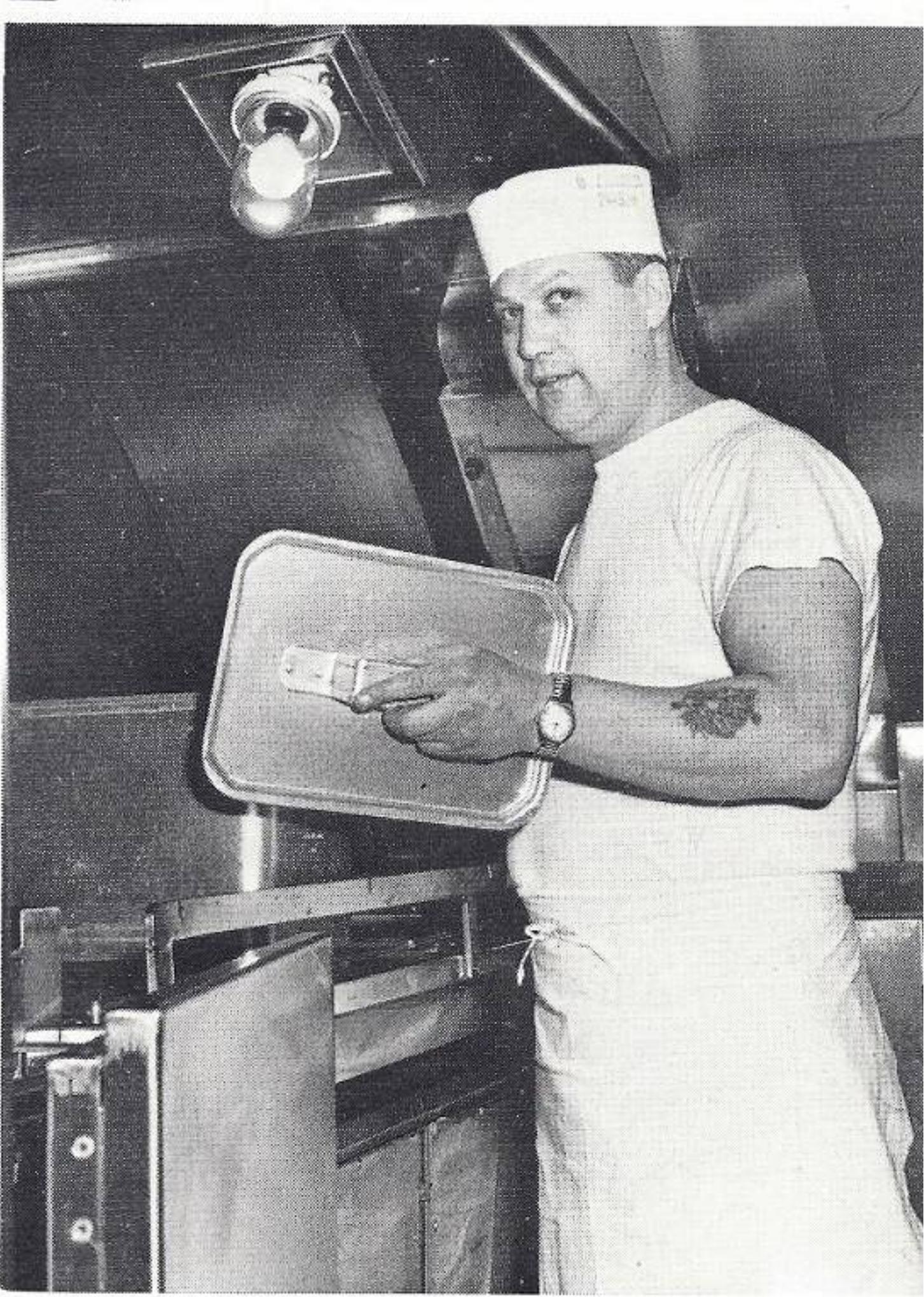
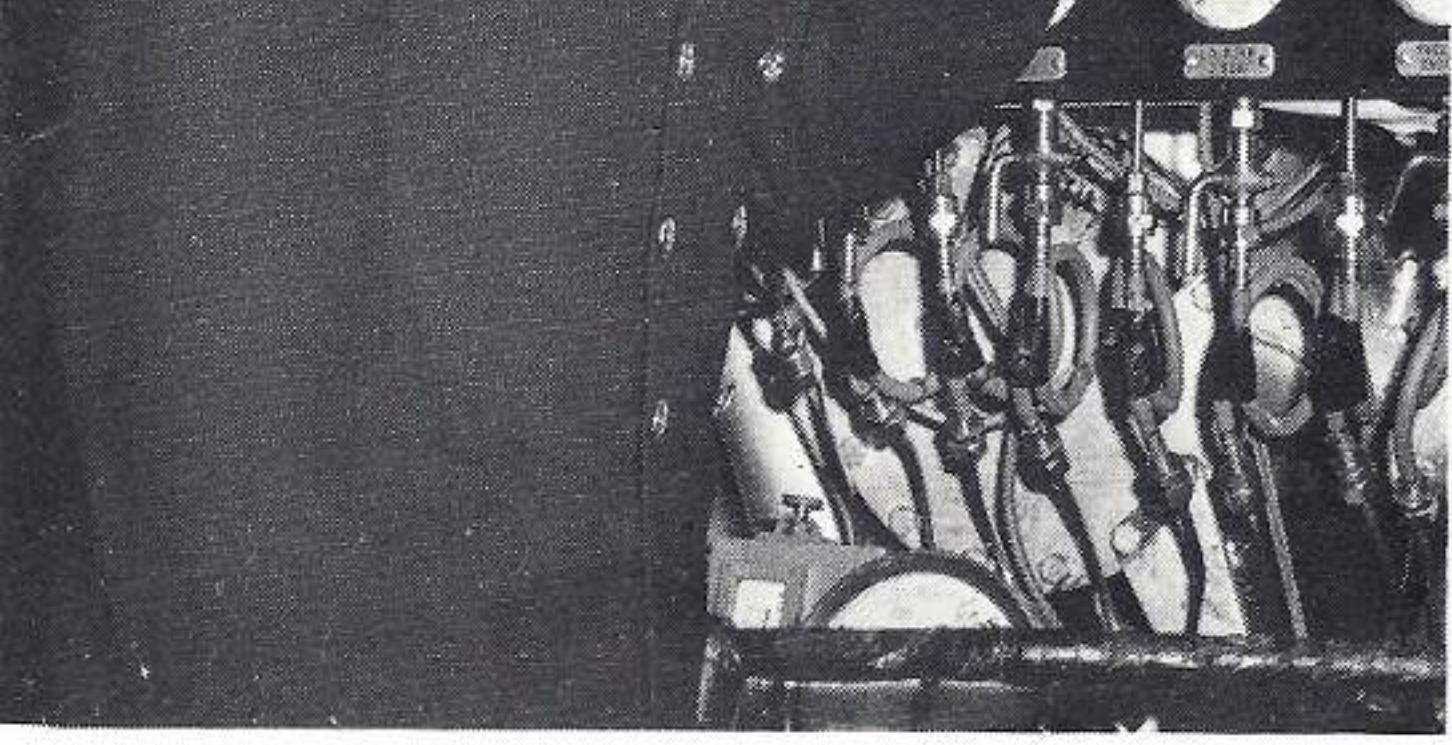
The Commanding Officer speaks to the Ship's Company.

The Ship's Company man ship.

The Commanding Officer is piped on board.

The Guest of Honour and Official Party tour HMCS Okanagan.







THE SHIP'S BADGE

BLAZON: Or, issuing out of a base barry wavy of four Azure and Argent, a Marine Monster, "Ogopogo" Gules, langued of the second.

SIGNIFICANCE: This design pictures a fanciful heraldic version of a "Marine Monster" that is reputed to inhabit Lake Okanagan in British Columbia, and which has been given the name "Ogopogo".

Although anthropologists discount the existence of any Marine Monster in Indian folklore, the legend persists, indeed there are responsible people who have sworn to having seen it.

Be that as it may, the Ogopogo legend certainly lends itself to the romance of Heraldry, and there are numerous well-known precedents for it, such as the dragon, griffin, unicorn and so on.

The Monster illustrated here is purely imaginary, even to being coloured red, when Ogopogo, real or fable, is said to be of a greenish complexion.

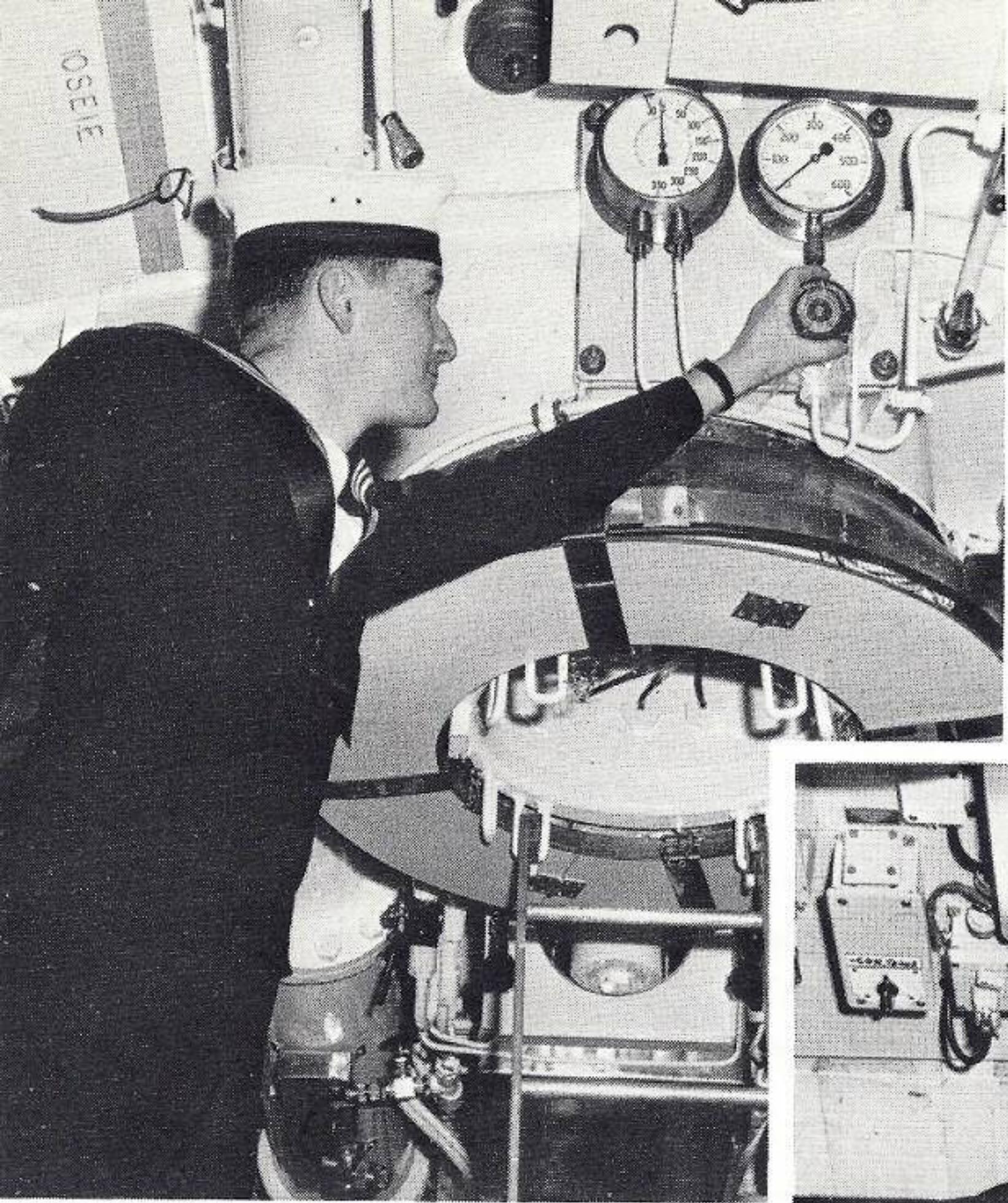
SHIP'S COLOURS: Scarlet and Gold.

THE NAME

HMCS Okanagan is named in honour of an Indian people, a branch of the Interior Salish nation of British Columbia and the State of Washington. Their name has already been given to the lake around which many of them lived, the river that drains the lake, the valley in which the river flows and a neighboring range of mountains.

The spelling of the name has varied considerably in the past and two versions are now in use: Okanagan in British Columbia and Okanogan where the river flows through Washington State to join the Columbia River.

While no vessel by this name has previously served in the Canadian or Commonwealth navies, the United States fleet includes the attack transport "Okanogan".



THE OKANAGAN STORY

The Okanagans are a branch of the Interior Salish nation of British Columbia in Canada and the State of Washington in the U.S.A. They were not a long-house people, but built individual family dwellings—pits roofed with wood and turf for winter and light frame lodges covered with rush mats for summer.

They lived by hunting and fishing and their principal foods were salmon, venison, bear meat and other game. Their only crop was tobacco.

The most remarkable handicraft of the Okanagan people was basketry, for their ware was watertight. In fact, they used baskets as cooking pots, dropping in heated stones until the contents boiled.

Both dug-out and bark canoes were used by the Okanagans, but they did most of their travelling on foot because of the violent rapids on the rivers of the mountain region where they lived. The bark canoes were of an unusual design, being longest at the keel and shortest at the gunwale, giving the craft a ram-like stem and stern.

The Indian's first contact with the white man was in 1811 with the traders of John Jacob Astor's fur brigades exploring the interior from their base at the mouth of the Columbia. The Okanagan valley gave access to the whole of the interior of New Caledonia—now called British Columbia.

In 1826 the Hudson's Bay Company started using the same route and continued to do so until the international boundary was established and the United States began collecting customs duties for furs. This forced the company to transfer its west coast base to Fort Camosun (now Victoria, B.C.) in 1847. Some gold was discovered in the valley in 1860, but it was not until the late 1880's that Europeans moved into the region to settle after the Canadian Pacific Railway line had been built, bringing them close to the north end of the valley.

FIRST CANADIAN SUBMARINE SQUADRON

HMCS Okanagan will join the First Canadian Submarine Squadron based at Halifax, N.S.

This squadron was formed on April 22, 1966, and now includes HMCS Ojibwa and HMCS Onondaga.

The First Canadian Submarine Squadron succeeded the Royal Navy's Sixth Submarine Squadron which was formed in Halifax in March, 1955. The submarines provide anti-submarine training to surface ships and aircraft of Maritime Command. Over the years they have proved to be the busiest units of the Atlantic fleet.

The era of the submarine in the Canadian Armed Forces did not really begin until 1961, when HMCS Grilse (the former USS Burrfish) was commissioned at Groton, Connecticut. She has since been engaged in the training of ships and aircraft in anti-submarine warfare on Canada's Pacific coast.

ROGER DUHAMEL, F.R.S.C.
Queen's Printer and Controller of Stationery
1968

