

New anti-submarine frigates commissioned for Canadian navy

A \$3.85-billion contract for the building of six new anti-submarine patrol frigates for the Canadian navy has been awarded to Saint John Building and Dry Dock Company of New Brunswick, it was announced recently by Defence Minister Gilles Lamontagne and Supply and Services Minister Jean-Jacques Blais.

The six frigates, anti-submarine patrol vessels equipped with the latest electronic weaponry and missiles, will be the first new fighting ships to be delivered to the navy in almost two decades when they start to go into service late in this decade.

The new frigates will have the potential of being among the most formidable ships of their type afloat, military analysts say. The ships have the necessary weapons and sensor systems but these must be followed through with additions to submarine-fighting machinery.

The ships' design attempts to remedy many of the fatal flaws revealed during the Falklands war. To counter the threat of sea-skimming missiles, the 4 200-tonne displacement frigates will be equipped with the US phalanx system, a modern Gatling gun that can fire up to 5 000 rounds a minute creating a "wall of lead" designed to destroy incoming missiles only seconds from impact.

Critics say this system, never tested in action, is effective only against head-on targets, but Canadian naval sources said an ability to kill a traversing missile was a prime consideration in selecting the weapon.

Aerial attackers

To destroy aerial attackers located by radar at long range, the ships will carry the RIM-7 Seasparrow, an updated version of

a missile carried by the navy's *Tribal*-class destroyers. But where the older ships can fire eight missiles from angled pods on either side of the superstructure, with two minutes for reloading, the frigates will be able to launch all of its missiles in quick succession from vertical launchers. The ship design will enable the anti-air missile battery to be expanded to 28 launchers where the air threat is particularly fierce.

The RIM-7 recently completed tests with the US navy. The missile has a range of about 20 kilometres, homing on a radar beam bounced off the target, and while response time is classified, the system is touted as being capable of making at least two shots at an incoming missile, such as the French sea-skimming Exocet, from the time the alarm is given.

Another defensive element is the ships' forward gun. It was originally proposed that the frigates carry the 76-millimetre gun common to most NATO navies, but this has been changed to a 57-millimetre Bofors which, by using enhanced ammunition, will do the same job as the heavier weapon. The Bofors can fire up to 100 rounds a minute and is considered agile enough to take on attacking aircraft as well as providing offensive fire.

Harpoon missile

In addition to this gun, surface targets will be engaged by the US harpoon missile, a system which can skim over the surface of the sea and "pop up" to attack a target at ranges of about 100 kilometres. The frigates will carry four harpoons in two launchers.

The primary role of the Canadian navy

in NATO is anti-submarine warfare, and the patrol frigate will be equipped with both Canadian and US-designed hull-mounted and towed sonar systems designed to locate underwater targets. The ships will also carry on the deck a *Sea King* helicopter, equipped with anti-submarine torpedoes, and two triple-torpedo launchers.

The new frigates, which will be 4 200-tonne vessels just over 133 metres long, will be named after major Canadian cities. The first to be delivered will be called the *Halifax* and the others will be, in order of projected delivery, the *Vancouver*, *Ville de Québec*, *Toronto*, *Regina* and *Calgary*.

Canada aids Pakistan

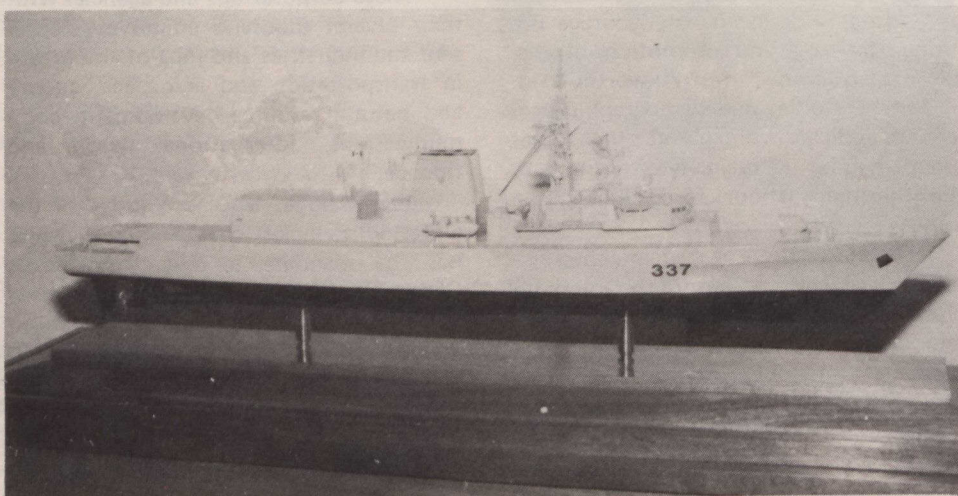
Deputy Prime Minister and Secretary of State for External Affairs Allan MacEachen has announced that Pakistan will purchase a *Twin Otter* aircraft, spares and training for \$2.2 million. The aircraft, to be used for reconnaissance, will be purchased through an existing \$15-million Oil and Gas Sector Developmental Line of Credit established by the Canadian International Development Agency in 1979.

Mr. MacEachen made the announcement during a brief ceremony in which three Memoranda of Understanding (MOU) between Canada and Pakistan were signed. Foreign Minister Sahabzada Yaqub Khan represented the Pakistan government.

The three MOU included a \$6-million grant for emergency food relief to assist Afghan refugees in Pakistan, a \$3.2-million loan and \$2-million grant to provide Canadian technical assistance to the Oil and Gas Development Corporation (OGDC) of Pakistan as well as a \$5.5-million grant for an accelerated program of immunization against polio.

Mr. MacEachen said that he was encouraged by the increasing priority being placed on the health and social sectors particularly where the lives of women and children were affected. CIDA recently announced a broadening of the base of Canadian aid to Pakistan to encourage private sector involvement in Pakistan's development as well as a general shift from large-scale infrastructure to greater emphasis on the agriculture and social sectors.

Mr. MacEachen also made public Canada's pledge of \$5 million to the United Nations High Commissioner for Refugees for the relief of Afghan refugees in Pakistan.



Scale model of one of the six anti-submarine frigates to be built for the Canadian navy.

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