

Tribal Update Modernization Programme: TRUMP, announced prior to the 1987 White Paper, consists of a mid-life update for Canada's four DDH 280 destroyers, which entered service in 1972-1973. The destroyers will receive new command, control, communication, and combat systems. The new combat systems will provide defence against air and anti-ship missile attack as well as the ability to defend other ships. The total estimated cost of the TRUMP is \$1.7 billion. Work on the first destroyer, the HMCS Algonquin, began in November 1987 and is scheduled for completion by spring 1990. The modernization of the HMCS Iroquois is well underway and is expected to be completed by fall 1990. The completion date has been extended to the high end of the eighteen to twenty-five-month range envisaged by DND for the Iroquois. This work is being done by Marine Industries Limited (MIL) of Montreal at their Davie Shipyard in Lauzon, Quebec. In Spring 1989, Litton Systems Canada Ltd., the prime contractor, awarded the sub-contract for modernizing the second batch of two ships, HMCS Athabaskan and HMCS Huron, to the MIL Davie Shipyard. These modernizations are to be completed by fall 1991 and late summer 1992, respectively.

Patrol frigates: The Canadian Patrol Frigate (CPF) programme was initiated in 1983 for the procurement of six ships. Total estimated cost of the programme, including a second batch of six additional ships ordered in December 1987, is \$8 billion. St. John Shipbuilding Limited and Marine Industries Ltd. of Montreal are building three frigates each (HMCS Halifax, Vancouver, Toronto and Ville de Québec, Regina, and Calgary, respectively) in the first batch. The first of the new ships, HMCS Halifax, was launched in May 1988. Work began on the second, third and fourth ships, the HMCS Ville de Québec, HMCS Vancouver and HMCS Toronto in May 1987, December 1987, and January 1988, respectively. Final delivery schedules for the six ships has slipped, resulting in a delivery date for the HMCS Halifax in spring 1990, a full year behind the schedule specified in the original 1983 contract. Delivery dates for the remaining five ships stand as follows:

- 2nd ship--September 1990
- 3rd ship--April 1991
- 4th ship--April 1991
- 5th ship--October 1991
- 6th ship--April 1992

Whereas the first frigate contract was split between two companies, St. John Shipbuilding was awarded the contract to build the entire second batch of frigates. These ships should all enter service by 1996. Possible design changes, including a lengthening of the second batch of frigates by ten metres, are being considered. DND has officially denied reports that the new frigates will be unstable owing to increases in weight that were not taken into account in the original design.

Low-Level Air Defence (LLAD) system: On 16 April 1986, DND announced the awarding of the contract for a Low-Level Air Defence (LLAD) system for the Canadian Forces. The Oerlikon-Buhrle Litton consortium received the contract of \$1.14 billion to provide the Canadian Forces with thirty-six Air Defence/Anti-Tank Systems (ADATS) and twenty 35-mm twin guns with ten accompanying fire-control units. The Air Defence/Anti Tank Systems will be deployed at bases in Baden-Soellingen and Lahr, West Germany, as well as with the Canadian Air Sea Transportable (CAST) Brigade, whose current role is to be ready for deployment in Norway in the event of crisis (this obligation is scheduled to cease 30 November 1989, at which time the CAST will be assigned to the defence of the European Central Front). Initial delivery of the twin guns to the Canadian Army in