



# Bulletin

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## NEW LOOK FOR CANADA'S ARMED FORCES

*The following is a statement by Mr. Léo Cadieux Minister of National Defence, on September 19:*

To set the scene for the statement I am about to make, I would refer you to two previous statements: the Prime Minister's on April 3 and my statement in the House of Commons on June 23. In these statements the rationale for changes in Canada's defence posture is set out with the roles for the forces stated as follows:

- (a) The surveillance of our territory and coast-lines i.e., the protection of our sovereignty;
- (b) the defence of North America in co-operation with United States forces;
- (c) the fulfilment of such NATO commitments as may be agreed upon; and
- (d) the performance of such international peace-keeping roles as we may from time to time assume.

The Government, as you will recall, has undertaken to restructure our forces over a period of time so that the equipment and training for the above roles at home and abroad will be compatible. As I informed the House at the beginning of June, we believe, barring unexpected international developments, that we can achieve the transition within a defence budget which will be maintained for the next three years at its current dollar level of \$1.815 billion *per annum*.

It is against this background that I shall now enlarge on the outline force structure contained in my June 23 statement, which forecast the changes necessary to give substance to the Government policy on defence. There are still some consequential decisions to be made but, by and large, the forthcoming shape

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of the Canadian Armed Forces can now be enunciated.

The force I am about to describe is considered by my military advisers to be a viable force capable of meeting the tasks set by the Government.

Extensive consultations have taken place in NATO over the past three months in fulfilment of the Government's undertaking to take account of the views of its allies in bringing about the planned and phased reduction of the size of the Canadian forces in Europe.

During these consultations, Canada has reaffirmed its intention to meet, in a responsible manner, its collective security obligations under the North Atlantic Treaty and to continue to play an active and constructive role in support of the values we share with our allies.

Certain details remain to be worked out before firm commitments for 1970 are made by NATO governments at the annual ministerial meeting in December, but the general make-up and roles of the Canadian forces for NATO can now be given. I can now also outline the changes being made to our forces in Canada.

#### NATO - EUROPE

First, I shall deal with our NATO commitment in Europe. We plan to phase out our brigade group and our air division in Germany by the autumn of 1970, when we shall establish co-located land and air elements under one Canadian headquarters. These

will be in southern Germany on our present air division bases at Lahr and Baden Solingen, and will be interim forces for the next three years. They will use present equipment and will have a combined total strength of approximately 5,000 personnel. The Supreme Allied Commander Europe has assured me that this provides a structure that will allow Canadian forces to continue to fulfill in Europe a meaningful though reduced role.

The land force will be a mechanized battle group of approximately 2,800 personnel with an operational role in the Central Army Group area. The air element will be a group of three squadrons of *CF-104s*, one in the reconnaissance and two in the strike role. The air group will remain under operational command of the 4th Allied Tactical Air Force. The brigade in Germany will drop the *Honest John* nuclear role when it is reconfigured next year and the nuclear strike role for the air element will continue only until January 1972.

As I said, these are interim forces. For the post-1972 period we plan to equip a land element in Europe, of approximately the same size as the interim group, as a light "airmobile" force and to convert the air element to a conventionally-armed ground support or reconnaissance role.

We shall continue to retain the commitment to provide from the forces in Canada an air-sea transportable brigade group to reinforce the NATO northern flank in an emergency. This brigade group will contain the battalion group which is on standby in Canada as an "airportable" force for the Allied Command Europe Mobile Force (Land). Our similar commitment of a battalion group to NATO's southern flank will be discontinued in 1970.

#### MARITIME COMMAND

Turning now to our NATO maritime commitment, we shall continue to earmark virtually all of our Atlantic operational maritime forces for assignment to the NATO Supreme Allied Commander Atlantic (SACLANT) in the event of an emergency.

We shall take out of commission the carrier *Bonaventure* and the escort maintenance ship *Cape Scott* in 1970. We shall retain most of the *Tracker* aircraft from the carrier for land-based operations until 1973. We shall retain the *Cape Scott* as an alongside workshop and accommodation facility in the dockyard in Halifax for the foreseeable future and we shall dispose of the *Bonaventure* as surplus.

Plans are continuing for bringing into service our second new operational-support ship and the four helicopter-destroyers now being built. The manning of three existing destroyer escorts will be reduced to training levels over the next two years.

We shall retain our *Argus* long-range patrol aircraft and increase their role in the Arctic, while continuing their mid-ocean surveillance duties. We shall employ our *Tracker* aircraft from shore bases on a coastal surveillance role until they are disposed of in 1973. We plan to replace the *Argus* after 1973.

#### MOBILE COMMAND

Mobile Command forces in Canada will remain at approximately their present level, but will be restructured in 1970 from four combat groups to three (with headquarters in Calgary, Petawawa and Valcartier) and we shall form a task force headquarters, initially at Gagetown (present location of the fourth combat group headquarters), for subsequent location in the Far North.

The airborne regiment is being retained and will have three commandos instead of the present two. The third commando is being formed in the battle group in Europe where it will share infantry duties with the 1st Battalion, Royal 22nd Regiment.

Infantry battalions in the combat groups will again have their normal four companies rather than the present three. We are re-equipping our artillery and armoured regiments in the combat groups with air-portable artillery and air-portable armoured vehicles. Some heavy mechanized equipment is being retained at Gagetown as training support for our interim land force in Europe.

We will move the Combat Arms School from Borden to Gagetown and we will move the Artillery School from Shilo to Gagetown, where it will become part of the Combat Arms School.

As part of the reconfiguration in Europe in 1970, we shall return the 2nd Battalion, Princess Patricia's Canadian Light Infantry, to Canada and station them at Shilo and return the 2nd Battalion, the Royal Canadian Regiment, and station them at Gagetown.

We are budgeting over the next few years for some 2,500 new 1¼-ton trucks to modernize our land-force vehicle fleet and have recently signed a contract for 50 Bell Utility Tactical Transport Helicopters (UTTH) to be used primarily in Mobile Command. These twin-engine helicopters will be powered by Canadian-built engines from United Aircraft of Canada. Delivery will begin in 1971.

#### FAMOUS UNITS DISBANDED

A decision to revert to a nine-battalion, three-regiment infantry structure was based on military advice following the experience of recent years which convinced infantry corps officers that regiments of one, or even two, battalions posed serious career, manning and morale problems related to the necessity for frequent cross-postings. Consequently, it was decided to retain the three infantry regiments with the longest history of regular force service: The Royal Canadian Regiment, the Princess Patricia's Canadian Light Infantry and the Royal 22nd Regiment.

As a consequence, and regrettably, the following well-known Canadian infantry regiments will no longer form part of the regular force: The Canadian Guards, The Queen's Own Rifles of Canada and The Black Watch (Royal Highland Regiment) of Canada.

The 2nd Battalion, The Canadian Guards, will be redesignated as the 3rd Battalion, The Royal Canadian Regiment, and the 1st Battalion, The Queen's Own Rifles of Canada, will be redesignated

as the 3rd Battalion, Princess Patricia's Canadian Light Infantry.

In our force restructuring it was also found necessary to remove one artillery and one armoured regiment from the regular force. Using the seniority principle, but retaining two recently organized *Fran-cophone* regiments, we have decided that the Fort Garry Horse and the 4th Regiment, The Royal Canadian Horse Artillery, will no longer appear in the regular force order of battle.

Members of the Fort Garry Horse, the Black Watch and 4 RCHA will be transferred to other units as individuals, frequently remaining on the same base. For example, members of the Black Watch will be absorbed into the 2nd Bn, RCR, when the unit moves to Gagetown.

#### AIR COMMANDS

We are continuing close consultations with our United States allies on the question of the immediate and future structure of North American air defence forces. The Canadian air defence forces will remain much as they are for the present.

Air Transport Command's long-range *Yukon* fleet will be reduced from 12 to four by 1973. The nine *Cosmopolitans* now in that command will be transferred to Training Command in 1972 for a new role. We shall retain our 23 *Hercules* troop and cargo aircraft but shall reduce Transport Command's *Dakota* fleet by approximately 15 during 1970. We are continuing our studies for the requirement for a long-range jet transport to replace the *Yukons*.

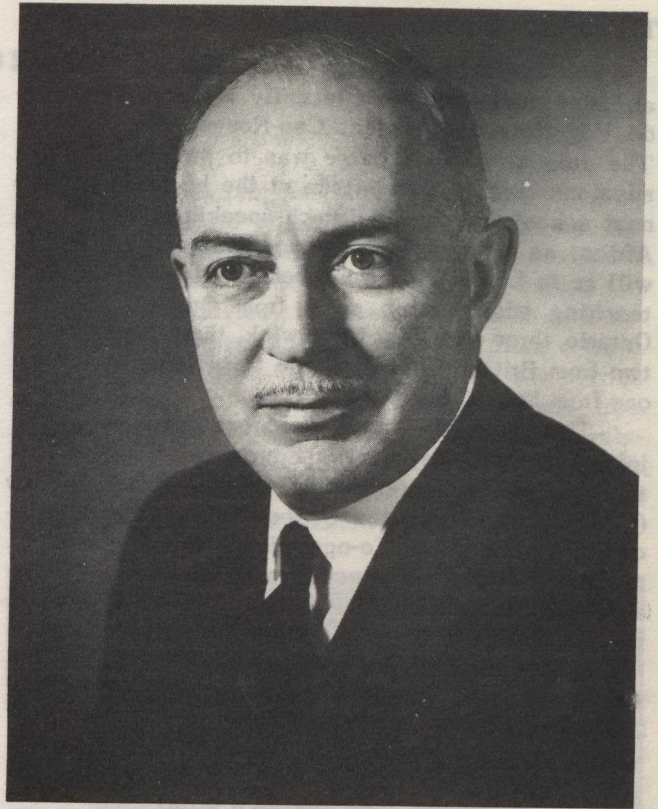
#### SEARCH AND RESCUE

Search and rescue continues to be an important part of our activities. We shall maintain our present number of rescue-co-ordination centers, and, over the next two or three years, improve our aviation capability in this field although slightly reducing the numbers of aircraft. This will be done by converting six of our *Buffalo* aircraft to this role and purchasing six new STOL aircraft capable of operating off land, water or snow. We will retire our *Albatross* aircraft and search and rescue *Dakotas* as the new aircraft come into service. We will also make some adjustments to our present helicopter distribution.

#### TRAINING, RESERVES AND CADETS

Training Command will reflect the reduced size of the forces. The *Dakota* navigation trainer (23 aircraft) will be retired in 1972 and replaced with the *Cosmopolitans* from Air Transport Command. During 1970, our *Tutor* and *T33* trainer fleet in this command will be reduced. We will retire the *C-45 Expeditors* trainer (53 aircraft) also during 1970.

We intend to reduce the size of our reserve forces and we are consulting with the Conference of Defence Associations on how we can make the most effective use of a smaller reserve force in support of



*The Honorable Léo Cadieux,  
Minister of National Defence*

our revised regular force. I should stress, however, that the reserves will continue to play a significant role in our defence structure.

Our support for the cadet program will continue at the present level of 100,000 cadets.

#### BASE CLOSURES

Some weeks ago, I announced the closing of a number of bases and facilities. At that time, I said a further announcement regarding a small number of other bases would be forthcoming. This is still the case. Final decisions have not yet been made on these bases but I expect to be able to make an announcement in a few weeks' time.

#### PERSONNEL

To operate the reconfigured force I have just described, we shall require approximately 82,000 military personnel and 30,000 civilians. This will mean a reduction of something in the order of 16,000 military and 5,000 civilian positions over the next three years. I previously announced that we shall not institute a plan of forced attrition of military personnel for the purpose of reaching the new force levels. This is still our intention, and, in fact, we shall continue recruiting at a reduced but still substantial level. A determined effort will be made to assist civilian personnel in finding new employment either in or out of the public service....

## TEACHERS TO FRENCH-SPEAKING AFRICA

One hundred and seventy-seven Canadian teachers attended study sessions recently at the Notre-Dame de Foy Normal School at Cap-Rouge, near Quebec. The purpose of the course was to prepare them for missions they will undertake at the beginning of the next school-year to 16 French-speaking countries in Africa, as well as Madagascar; two of the teachers will go to Laos. Of this number, 120 teachers and 26 teaching missionaries come from Quebec, 20 from Ontario, three from New Brunswick, three from Alberta two from British Columbia, one from Nova Scotia and one from Saskatchewan.

This year the study sessions were organized jointly by the Department of Education of Quebec and the Canadian International Development Agency (CIDA). In addition, the Quebec Department of Education's External Co-operation Branch assumed responsibility for the selection of the French-speaking and English-speaking candidates. A member of CIDA took part in meetings of the selection group.

Under this program 378 successful candidates will teach in 17 French-speaking countries in 1969-70, compared to seven in 1960.

## CANADA AT FRANKFURT BOOK FAIR

Canada will participate for the eighth consecutive year in the Frankfurt International Book Fair from October 8 to 13 in West Germany.

The collective Canadian exhibit will include 44 publishers who are members of the Association des Editeurs Canadiens and of the Société des Editeurs de manuels scolaires du Québec, as well as members of the Canadian Book Publishers' Council of Toronto, and will present 960 titles. The two French-language associations will present 575 titles and the English language group will present 250. In addition, the Queen's Printer, Ottawa, will present 135 titles published in both English and French.

The annual exhibition of works published by Canadian publishers is organized under the patronage of the Cultural Affairs Division of the Department of External Affairs in co-operation with the Canada Council, the printing and publishing departments of the Canadian Government and the Canadian Government Exhibition Commission (Department of Public Works), which constructed the stand for the fourth consecutive year.

## FIRST SEASON FOR ARTS CENTRE

The National Arts Centre Orchestra, Le Théâtre du Capricorne, the two resident companies of the Centre and the Stratford National Theatre of Canada will make their first appearances within the next four weeks at the opening of the first full season of performances at the new National Arts Centre in Ottawa.

The Orchestra, under its permanent conductor Mario Bernardi, performed its first concert in the Opera House on October 7. Le Théâtre du Capricorne began the first of ten series with Durrenmatt's *La Visite de la vieille dame* in the Theatre on September 30, which will continue until October 11.

The Stratford National Theatre of Canada, which, for the first time will make its winter home in Ottawa begins its first autumn and winter series with *Hamlet*, and Ben Jonson's *The Alchemist*, both of which were highly successful this summer at Stratford, Ontario. Kenneth Welsh will star as Hamlet, with Leo Ciceri as Claudius and Angela Wood as Gertrude. William Hutt plays Sir Epicure Mammon in the Jonson comedy, with Powys Thomas as Subtle and Bernard Behrens as Face.

Le Théâtre du Capricorne, under its artistic Director Jean-Guy Sabourin, will present ten series of four productions. Besides the Durrenmatt play, the company will produce Molière's "Les Fourberies de Scapin", an original work by the Canadian film director and author Pierre Perrault, and a recital by composer Jean-Pierre Ferland, winner of the Grand Prix of the Charles Cros Academy.

Sets for Le Théâtre du Capricorne are by Mousseau, costumes are designed by Solange Legendre and original music for the productions has been composed by Jean-Marie Cloutier. The 24-member company includes such well-known Canadians as Monique Lepage, Jacques Galipeau and François Guiller.

## POPULATION ESTIMATES

As of July 1, Canada's population was estimated at 21,089,000, an increase of 317,000, or 1.5 per cent, since July 1, 1968. Increases were registered of 331,000 between July 1, 1967, and July 1, 1968, and of 391,000 between July 1, 1966, and July 1, 1967. The smaller increase in the 12 months ending July 1, 1969, compared to that for the year ending July 1, 1968, is almost entirely due to the arrival of fewer immigrants.

Provincial increases in the 12 months ending July 1, 1969, were led by Ontario, with 146,000, or 2.0 per cent. British Columbia gained 62,000, or 3.1 per cent; Quebec gained 56,000, or 0.9 per cent; Alberta gained 34,000, or 2.2 per cent; Manitoba gained 8,000, or 0.8 per cent; Newfoundland gained 6,000, or 1.2 per cent; Nova Scotia gained 4,000, or 0.5 per cent and New Brunswick gained 1,000, or 0.2 per cent. Prince Edward Island was unchanged, and Saskatchewan lost 2,000, or 0.2 per cent.

The starting-point of these estimates is the population count of the census of June 1, 1966. To the provincial counts are added births and immigrants; deaths and estimated emigrants are subtracted, and an allowance is made for interprovincial migration. These estimates are subject to revision after the 1971 census of Canada.

## COMPUTERS FOR THE BLIND

Each year an increasing number of blind persons are becoming economically self sufficient — thanks to the computer.

Hundreds of sightless persons have found employment in computer programming or related fields since the computer came into common commercial use. Most of these are in the United States, where an acute shortage of skilled personnel in a field which can be highly automated, so as to tie in with a blind person's abilities, has led several universities and at least six commercial schools to institute courses of instruction for the blind. The major computer companies have contributed by making their instruction manuals available in Braille.

The field of computer operation thus presents a rosy job-placement picture for the blind both in the U.S. and Canada, where progress has not been as swift as south of the border. However, the situation is improving in Canada and the University of Manitoba now offers a one-year course to train sightless persons as computer programmers. A dozen or so persons have been trained since the inception of the course in 1965.

### SPECIAL KITS

To date, most of the special instrumentation required by blind programmers has been provided by the major computer manufacturers. Conversion kits have been made available to produce Braille instead of print from computer printers. These kits can be installed or removed quickly and easily, and thus do not interfere with normal use of the facilities by other personnel. One company also makes a program available to convert their computer output to the condensed (Grade II) Braille code (i.e., instead of letter for letter translation). Special photocell devices have been designed to make it possible to read the lights on the instrument panel.

One aspect that has been somewhat neglected is the production of a device which will enable the blind programmer to read a single punched card at his desk. A type of single-card reader has been devised in the United States. The card is placed in a base plate and a slotted bar is moved along the base over detents at each of the 80 possible column positions; its position may be read by various markings on the edge of the base.

In each of the positions, the card is explored for holes by running a pin along the slot; when a hole is located its position is indicated by marks along the slot.

Although this method is quite successful when the locations are known and merely being confirmed, it is extremely tedious when each of the 960 possible hole locations must be explored, and it takes several minutes.

### NRC DEVICE

To assist blind programmers in their work, James Swail, 42, a blind electronics expert with the National Research Council of Canada, has devised a manually-operated reader for IBM punched cards.

With this device, the card is held in a base-plate and a carriage is moved manually along a track attached to the base. The edge of the plate carries a raised scale calibrated in Braille numbers from 0 to 80 to indicate the carriage's position in relation to the card. The carriage has a row of 12 pins which are normally flush with its top surface and a second Braille scale indicates the pin number.



*Blind programmer uses the new reader to scan a punched card in a matter of seconds.*

On the under side of this carriage is a corresponding row of 12 rollers which are connected to opposite ends of pivoted arms. The other ends of these arms drive the pins. The rollers are held against the surface of the card by spring tension and, due to the reversal action of the pivoted arms, the pins are caused to rise from their flush positions when the appropriate roller drops into a hole in the card.

Thus, when scanning a card for holes, the finger is held lightly against the surface of the carriage while it is moved along the length of the card. When a hole is found the appropriate pin rises, the carriage is stopped, and a reading of the location is taken from both raised scales. With this device a card may be scanned in a matter of a few seconds.

Mr. Swail took two years to design and build his reader. For the last few months he has been evaluating its operation in the hands of an upper-level blind-computer programmer.

"Once we have determined the machine's limits and obtained a clearer idea of its need, I expect the next step will be to convert it from manual to electronic operation," Mr. Swail says.

This is the latest in a series of inventions to aid the blind that have originated with Mr. Swail — blind since early childhood. A Bachelor of Science graduate from McGill University, Mr. Swail joined the Navigational Aids Section of NRC's Radio and Electrical Engineering Division in 1946. At first, he worked on special electronic instruments to help him conduct his own research; then, in 1951, he joined the Division's Instruments Section. Since that time, a score of vocational aids for the blind have been produced by his laboratory. These aids have done much to increase the employment opportunities of the blind in industry and commerce.

### CANADA SAVINGS BONDS

A new series of Canada Savings Bonds that will double the investor's money in nine years went on sale this month.

This twenty-fifth and most attractive series to date offers purchasers an average annual yield of 8 per cent to maturity on November 1, 1978. For the fifth consecutive series, a buyer may choose to leave matured coupons uncashed and earn interest on interest.

Finance Minister E.J. Benson said that Canada Savings Bonds continued to be a unique investment. They have become a part of the fabric of personal planning by several million Canadians, and they are an essential element in the Government of Canada's financing program. They offer a wide range of individual Canadians an opportunity to contribute to national growth and development. Canadians own more than \$5.6 billion of Canada Savings Bonds, or about half of that part of the funded debt of the Government of Canada which is held by the general public.

A purchaser who buys a \$100 bond of the new series and holds the bond and interest coupons to maturity will earn \$72.50 in annual interest coupons and a further \$27.50 in extra interest from three compound interest certificates, bringing the total amount he receives in 1978 to \$200.

The regular annual coupons pay interest at the rate of 7 per cent in the first year, 8 per cent in the second and third years, and 8.25 per cent for each of the remaining six years, an average annual yield of 8 per cent to maturity.

Bonds of the new series went on sale on Oct-

ober 6, are dated November 1, and may be purchased up to and including November 14 at face value without payment of accrued interest.

### PAYROLL SAVINGS

Mr. Benson said that he looked forward to record purchases through the payroll savings plan, which, last year, permitted 662,623 employees of 5,492 companies to buy Canada Savings Bonds by the steady, practical method of regular payroll deductions. A further 1,317,410 cash purchases were made through banks and other financial intermediaries. Since Canada Savings Bonds were introduced in 1946 there have been 30,397,750 individual bond purchases, totalling almost \$25 billion in value.

Canada Savings Bonds of the 1969 series will be available to a maximum of \$25,000 for each purchaser. They may be bought by individuals, adult or minor; estates of deceased persons; trusts established for or on behalf of individuals; religious institutions; charitable organizations and other non-profit making associations, provided they are *bona fide* Canadian residents. Provisions of the 1967 and 1968 series permitting purchases by resident corporations and businesses are being discontinued.

"This year's issue is tailored for the smaller investor," Mr. Benson said. "The Canada Savings Bond is, above all, an investment for individuals who want a convenient savings plan. The attractive terms of the new issue have been designed to foster a growing volume of savings by Canadians, reinforcing our strong policies to break the 'inflationary psychology' which has been prevalent in Canada and throughout most of the Western world."

Purchases may be made through any branch of any bank and through authorized sales agents, including trust and loan companies and investment dealers. Coupon bonds are available in denominations ranging from \$50 to \$25,000, registered as to principal.

### BATTLE OF BRITAIN SUNDAY

Canadian Armed Forces personnel throughout Canada commemorated the Battle of Britain on Sunday September 21 in honor of those airmen who died in the great aerial battle over England in 1940. In Ottawa, more than 400 servicemen participated in ceremonies marking the twenty-ninth anniversary of the Battle of Britain, which was given its name by Winston Churchill. During the 114 days of dogfights in the skies over England and the English Channel from July to October 1940, 1,763 German aircraft, were destroyed, 120 by Canadian flyers.