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Changed and enlarged Cabinet - new Secretary of State for External Affairs

Changes in the Cabinet announced by Prime Minister Pierre Elliott Trudeau on September 14 include seven newcomers, nine reassignments and two new portfolios, enlarging the Cabinet to 31, with 15 ministers retaining their positions. There were 27 before the announcement.

The new Secretary of State for External Affairs is Donald C. Jamieson, former Minister of Industry, Trade and Commerce, who replaces Allan J. Mac-Eachen now President of the Privy Council and Government House leader.

Newcomers

The seven new ministers, sworn in by Governor-General Jules Léger on September 15, include Leonard S. Marchand of British Columbia, the first Indian to achieve Cabinet status, and two women, Monique Bégin of the province of Quebec and Iona Campagnolo of British Columbia, making a total of three women in the Cabinet for the first time, with Mrs. Jeanne Sauvé, who is Minister of Communications.

The other newcomers are John Roberts, Anthony Abbott and Jean-Jacques Blais of Ontario and Francis



Donald C. Jamieson, recently appointed Secretary of State for External Affairs, was formerly the Minister of Industry, Trade and Commerce.

Fox of the province of Quebec. Three ministers have resigned:

Mitchell Sharp, President of the Privy Council and Government House Leader; C.M. (Bud) Drury, Minister of Public Works and of Science and Technology; and Bryce Mackasey, Postmaster General and Minister of Consumer and Corporate Affairs.

Canada's new External Affairs Minister

Donald C. Jamieson, who became the Secretary of State for External Affairs on September 15, was born in St. John's Newfoundland in 1921. His new portfolio is the fifth he has held since leaving private life where he was a prominent broadcaster and journalist.

Mr. Jamieson's deep affection for Newfoundland prompted him to oppose the province's entry into Confederation. Thus he can claim the distinction of being the only federal minister, in modern times at least, to have voted on two separate occasions against becoming a Canadian. Today a strong and outspoken federalist, Mr. Jamieson describes himself as a Canadian "not by birth, nor by choice, but by conversion".

In 1963, Mr. Jamieson served as a member of the committee established by the Federal Government to study various aspects of Canadian broadcasting. He completed a four-year term as President of the Canadian Association of Broadcasters in 1965. As a private broadcaster, he served on several of that industry's committees, including one dealing with the technical relations between the Canadian Broadcasting Corporation and its private affiliates.

As an adviser to the Board of Broadcast Governors, the new Secretary of State for External Affairs, served as a member of its Consultative Committee on Private Broadcasting.

Political life

Mr. Jamieson was first elected to the House of Commons in September 1966. As a private Member, he served on the Volume 4, No. 39

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For the first time in Canada's parliamentary history, three women sit as Cabinet ministers. Sworn in by Governor-General Jules Léger on September 15 were Mrs. Iona Campagnolo

House of Commons Committee for Broadcasting, Films and Assistance to the Arts. He was a member of the Parliamentary Standing Committees for Fisheries and for Transport and Communications.

In July 1968, Mr. Jamieson was appointed Minister of Defence Production. He was named Minister of Transport in May 1969. In November 1972, he became Minister of Regional Economic Expansion. He was appointed Minister of Industry, Trade and Commerce in September 1975, his last portfolio before his present appointment.

In 1966, Mr. Jamieson wrote *The Troubled Air*, an analysis of Canadian broadcasting. He has also written articles on this subject and has contributed to histories and similar works a first-hand account of the many events that surrounded Newfoundland's entry into confederation.

Mr. Jamieson married the former Barbara Oakley of Greenspond, Newfoundland in 1946. They have four children.

New portfolios

Changed and new portfolios are:

Allan J. MacEachen, President of the Queen's Privy Council for Canada and House Leader, formerly Secretary of State for External Affairs.

Jean Chrétien, Minister of Industry, Trade and Commerce, formerly Presi-



(left), Minister of State to the Minister of National Health and Welfare (Fitness and Sport), and Miss Monique Bégin (above) Minister of National Revenue, Mrs. Jeanne Sauvé (right)

dent of the Treasury Board.

Donald C. Jamieson, Secretary of State for External Affairs, formerly Minister of Industry, Trade and Commerce.

Robert K. Andras, President of the Treasury Board, formerly Minister of Manpower and Immigration.

W. Warren Allmand, Minister of Indian Affairs and Northern Development, formerly Solicitor General of Canada.

James H. Faulkner, Minister of State for Science and Technology, formerly Secretary of State.

J. Judd Buchanan, Minister of Public Works, formerly Minister of Indian Affairs and Northern Development.

Jack (Bud) Cullen, Minister of Manpower and Immigration, formerly Minister of National Revenue.

Roméo Leblanc, Minister of Fisheries and the Environment, formerly Minister of State (Fisheries).

Leonard S. Marchand, Minister of State to the Minister of Industry, Trade and Commerce (Small Business).

John Roberts, Secretary of State. Francis Fox, Solicitor General of Canada.

Monique Bégin, Minister of National Revenue.

Iona Campagnolo, Minister of State to the Minister of National Health and Welfare (Fitness and Sport).

Anthony C. Abbott, Minister of Consumer and Corporate Affairs. Jean-Jacques Blais, Postmaster

General and Deputy House Leader.



became Secretary of State for Science and Technology in 1972 and Minister of the Environment in 1974. She was appointed Minister of Communications in December 1975.

Education emphasized in assistance to developing nations

Canada is prepared to focus assistance to a larger extent on education in developing countries, states the Canadian International Development Agency. This is one of the key points made in a second volume of sectoral guidelines for Canada's international co-operation program, published last month. Others are in the areas of health, population, housing, co-operatives and social communications.

Complementing the Strategy for International Development Co-operation, 1975-80, published by the Government September 2, 1975, the guidelines are based on a sector-by-sector examination of operations of the Canadian International Development Agency, and existing Canadian resources for international development programs. A first volume of guidelines was published April 30, 1976 on agriculture, forestry, fisheries and water development (see Canada Weekly dated May 26). A third volume will deal with infrastructures of developing countries.

Priorities in education

The guidelines identify three priorities under education:

- Gathering of basic education information by developing countries;

- the adaptation of educational insti-

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McGill's advanced studies through the years

Two volumes of the McGill University Thesis Directory, now published, list 4,600 theses accepted at McGill from students seeking advanced degrees from 1881 to 1973. For this period, the total of 10,500 theses represents about 14 per cent of the Canadian total of 74,000.

The first thesis for a Master of Arts degree was accepted in 1896. Its author, a McGill law graduate, wrote "The abolition of capital punishment according to the Hegelian philosophy". In 1905 an M.A. candidate wrote "Quebec in the seventeenth century, a study in social history"; in 1906, Walter Brown received his M.A. with "Socialism in British Columbia". An early M.Sc. worked under Ernest Rutherford on "Some reductions in the presence of finely divided nickel" and, in 1909, Mary J. Eaton, who was not the first woman to receive a master's degree at McGill, wrote "The element of satire in fiction by Englishwomen from Miss Burney to George Eliot". The same year there was another study on capital punishment and, in 1913, Margaret C. Going studied "Prisons and prison reform, with special reference to the United States". She was later elected to the United States House of Representatives.

Human rights

In 1920 a thesis was presented on "The Status of Women in the Province of Quebec" and another in 1930 was a study of "The Negro in Canada".

Gérard de Nerval was the subject of the first thesis to be accepted by the French Department in 1906. Orville S. Tyndale who was to become Associate Chief Justice of the Supreme Court of Quebec and eighth Chancellor of McGill University wrote an M.A. thesis entitled "Françoix Villon et la poésie lyrique en France au XVe siècle". However, it was only between the two world wars that Quebec themes emerged in the French Department, e.g. "Les origines du journalisme Canadien-Français" (1930).

Further information is available from Andrew Allen, Director, McGill Information Office, University of McGill, Montreal, Quebec, Canada.

British Prime Minister makes cross-Canada tour

After a week-long trip to Canada that began in Calgary, and included visits to Banff, Regina, Toronto, Quebec City, Sydney, Cape Breton and Louisbourg, British Prime Minister James Callaghan left Canada for England from Canadian Forces Base Shearwater, Nova Scotia on September 19. He was also present with Prime Minister Trudeau in Montreal to watch the final game of the Canada Cup hockey series on September 15.

Some of the topics

Mr. Callaghan, who held discussions with Mr. Trudeau and senior government officials as well as several provincial premiers, was accompanied on the last day of the tour by Privy Council President Allan MacEachen. The British Prime Minister said that talks had included Canada's relations with the European Economic Community, the southern African situation, Rhodesia, Namibia, problems relating to fisheries, as well as trade and co-operation in coal development.

Callaghan Trail

In recognition of Mr. Callaghan's dedication to preservation of the world's natural beauty, a three-mile trail in Gros Morne National Park, Newfoundland was named after him on September 16. Prime Minister Trudeau presented Mr. Callaghan with a large picture of the trail, together with a book of pictures showing scenes along the trail that rises to 2,644 feet above sea level.

The dedication states:

"In recognition of James Callaghan's steadfast dedication to the preservation and appreciation of the natural beauty of our world - and his untiring efforts toward the achievement of peace and brotherhood among nations, the Government of Canada is pleased to dedicate the hiking trail ascending the highest mountain of Gros Morne Park as the James Callaghan Trail."



Prime Minister Trudeau holds the dedication naming the James Callaghan | Prime Minister Callaghan in Ottawa.

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Sulphur may be valuable in roadway construction

Alberta's vast sulphur resources could be put to valuable use in the road-construction industry, according to findings from a research study conducted last winter by a University of Calgary civil engineering student.

A lightweight sulphur concrete base, designed by Peter Gifford, proved far more successful than conventional road-building materials in preventing frost penetration beneath a 30-foot test strip of pavement on the university campus.

Mr. Gifford, under the supervision of Dr. Jack Gillott of the civil engineering department, conducted the experiment as part of his thesis for a master's degree. The investigation was part of ongoing studies at U of C to discover new ways of using Canada's more than 19 million tons of sulphur, most of which is in Alberta.

"Climatic, soil and moisture conditions in Canada are such that frost action causes a major problem in the maintenance of highways and airfields throughout the country," Mr. Gifford notes.

Strenghthens surface

His research indicates that the sulphur-concrete base could provide an effective and economically feasible solution to the problem. Its insulating layers positively modify the temperature beneath the roadway while at the same time increasing the roadway's structure, something conventional insulating materials do not do.

"My experiments confirmed expectations that at the proper thickness, the sulphur-concrete base effectively impedes frost penetration into the subgrade soils, thereby reducing one of the major causes of pavement deterioration," he explains.

The added advantage of the sulphurconcrete base is that it improves the strength of the pavement systems.

"For example, roadways using the base would have a greater load capacity which would allow larger, heavier trucks to use them. Also, road bans usually enforced on many secondary highways each spring because of thawing could be reduced."

Adding further to the economic attractiveness, the thickness of costly asphalt topping could be substantially reduced in most cases without a loss in structural integrity.

He says the base consists of a preplaced lightweight aggregate which is bonded by the sulphur poured over the aggregate in the form of hot liquid. A few hours is necessary for the liquid sulphur-aggregate mix to cool and solidify, rapidly gaining strength as it does so.

Although no definite plans have been proposed, U of C is expected to continue lab studies and field trials using sulphur as a bonding agent in producing materials similar to concrete and soil cement.² for instance and teach

Canada/U.S. auto pact - Economic Council study

"The Canada-United States Automotive Agreement was one of the most successful economic decisions undertaken by the Canadian Government in the postwar era," concludes David E. Wilton, professor at the University of Guelph, Ontario, in a study released September 9 under the auspices of the Economic Council of Canada.

If the Government had not negotiated the automotive pact, and in the absence of all other policies, then the 1971 level of real output in the Canadian economy would have been over \$3 billion lower, he states. This would have also meant almost 300,000 fewer jobs. The author shows that the pact caused a 100 percent increase in the level of real output in the motorvehicle manufacturing industry. The automotive parts and accessories industry alone added an additional 26,000 employees and tripled its level of real output.

Effects on economy

The automotive agreement had the following effects on the Canadian economy for the year 1971:

 real gross national expenditure (GNE) was over 5 percent higher;

- total employment increased by almost 4 per cent;
- the general rate of inflation did not appreciably change although retail automobile prices declined by 12 per cent;
- while large increases in corporate profits (8.8 per cent) and in total wages, salaries and supplements (6.5 per cent) occurred, real wages per employee only moderately increased (2.6 per cent);
- real gross capital stock in the Canadian economy marginally increased (1.3 per cent); and
- there was a strong favourable effect on the current account of the balance of payments.

The author bases his findings on the assumption that the Government had no alternative policy available. He also warns of inherent errors in research of this type. The study compares, through simulation, the impact of the automotive agreement with an alternative industrial policy designed to stimulate investment in the manufacturing sector to the same level of output and employment obtained by the agreement. The most substantive differences in these two policy simulations rests in the impact on foreign trade flows and the balance of payments.

The 1971 simulated current balance deficit under the investment incentives program widens to an amount in excess of \$2 billion, in direct contrast to the small simulated surplus achieved under the automotive agreement simulation for the same year. The author believes that the tremendous surge in automotive exports generated by the agreement more than offsets the increased flow of imports that typically accompany a higher rate of economic activity.

Possible reversal

The situation could change, however. "The fact that the automotive trade surpluses of 1970-71 have dissipated into substantial deficits in 1974-75 may signal a reversal of some of the positive effects of the earlier years," he says.

The study, An Econometric Analysis of the Canada/United States Automotive Agreement: The First Seven Years, available from the Economic Council of Canada, Ottawa, for \$3.60, reflects the views of the author and not necessarily those of the Council.

Museum planes still flying

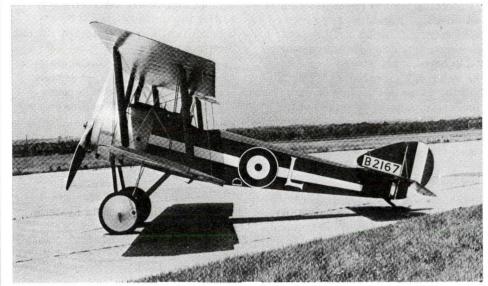
The National Aeronautical Collection, part of the National Museum of Science and Technology, was represented in the biggest airshow and aviation exhibition ever held in Eastern Canada recently. On September 4, 5 and 6 a Sopwith Pup and a Nieuport 17, exact reproductions of two fighter aircraft of the First World War, were flown in the Spectair '76 program at the Institut Aerotechnique in Montreal.

The National Aeronautical Collection, comprising over 90 aircraft and 200 engines, was originally formed in 1964 from the collections of the Royal Aviation Museum. It became part of the National Museum of Science and Technology in spring 1967.

Aircraft from the Museum's National Aeronautical Collection have been flown in air shows as far east as Summerside, Prince Edward Island, and as far west as Abbotsford, British Columbia, illustrating the technology of the airplane as it was 60 years ago.

The two aircraft in Spectair '76, the *Nieuport 17* and the *Sopwith Pup*, both of which are exact full-scale reproductions, are powered with original rotary engines of the First World War period. They were flown by two test pilots, Paul Hartman who is now with the National Research Council, and George Neal, Chief Production Test Pilot for de Havilland Aircraft of Canada.

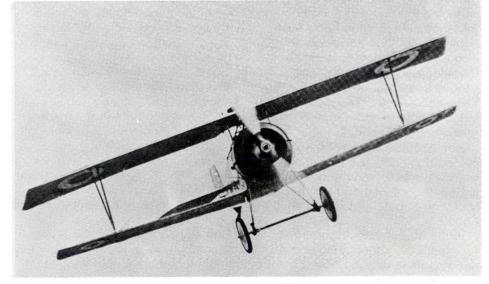
The *Nieuport 17* is finished in the Flying Corps markings of Billy



The Sopwith Pup

Bishop's aircraft B1566, in which he won the Victoria Cross for his attack on Esnes airfield on June 2, 1917. The plane has a wing span of 26 feet and a length of 19 feet 7 inches. It weighs 1,252 pounds fully loaded, and is powered with an original 110 hp. Le Rhone rotary engine. It can fly for two hours and has a maximum speed of 107 mph at 6,500 feet.

The Sopwith Pup, also an exact reproduction, is powered with an original rotary engine. It is an ancestor of the Sopwith Triplane and the more famous Sopwith Camel. The name "Pup" was applied by the pilots, who considered it to be the offspring of the larger 2-seat Sopwith 1½ Strutter. The name stuck despite officialdom's insistence that the 'aircraft be known by its as-



The Nieuport 17

signed designation Sopwith Scout. The Sopwith Pup has a wing span of 26 feet, 6 inches and is 19 feet, 3¾ inches long. It weighs 1,225 pounds fully loaded, and is powered with an 80 hp. Le Rhone rotary engine. It can fly for three hours and has a maximum speed of 106 mph at 8,500 feet.

Glimmer of hope for cardiac victims

Québec en bref, May 1976 issue, reports that a researcher and doctor of physics Eloi Bolduc has invented a new mathematical procedure intended for use in atomic physics but which is now seen to have possible applications in such fields as astrophysics, molecular biology, radiology, the medical sciences, chemistry, and the social sciences – areas where information is studied in numerical form and where data are shown by means of curves on charts.

Of particular interest is that this scientific discovery may save the lives of many cardiac patients by enabling doctors to detect latent signs well before a possibly-fatal attack occurs.

Mathematical method

The method, called "smoothing the curves", is simple enough to be applied to all data processed by computer or even by a "mini-computer". It is explained as follows: by straightening out certain curves using Bolduc's new mathematical method, data which were almost unnoticeable before the Volume 4, No. 39

"smoothing" of the curve now stand out clearly. This method involves making certain variations disappear by giving each point of the curve a new value equal to the sum of a quarter of the value of the preceding point, plus half the value of the point in question, plus one quarter of the value of the following point. This operation can be repeated several hundred or thousand times if necessary.

The cardiac patient

In the case of electrocardiograms showing the patient's condition to be normal, this new method could enable a physician to pick out certain premonitory signs of the illness too weak to be revealed by normal procedures.

If these new hopes prove to be wellfounded, fewer people, in the future, will be experiencing heart attacks weeks or even days after undergoing an electrocardiogram which showed them to be in perfect health.

Education emphasized in assistance to developing nations

(Continued from P. 2)

tutions to social, economic and cultural needs;

- establishment of basic "first-cycle' education programs, which would provide education for adults as well as children to enable them to evolve better and more productively in their own evolving environment. While the first two priorities would not be neglected, the Canadian program would be largely directed to this last priority.

In line with the strategy, CIDA will concentrate its efforts in the 25 poorest countries of the Third World.

CIDA will encourage in particular:

- The training of teacher trainers as well as teachers; the development of

Canada Weekly is published by the Information Services Division, Department of External Affairs, Ottawa, K1A OG2.

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Cette publication existe également en français sous le titre Hebdo Canada.

Algunos números de esta publicación aparecen también en español bajo el título Noticiario de Canadá.

Ähnliche Ausgaben dieses Informationsblatts erscheinen auch in deutscher Sprache unter dem Titel Profil Kanada. organizational and administrative skills; this training should be dispensed locally or in culturally similar third countries;

- technical and vocational training, as an integral part of educational, social and economic development;

- the training of unemployed young people who have had limited access to formal education;

- assistance to help countries to develop their own development agents and "animateurs".

CIDA's programs should fit in with the host country's national plan and budget so that they can be taken over without strain.

Canadian assistance must be in support of, and not a substitute for, national efforts.

Audio-visual techniques should be

used only when they fit in with the general educational program.

CIDA will not normally support projects for the construction of schools or similar institutions unless they are to be used as centres for community action — that is, used to the fullest extent.

Each sector covered by the guidelines has been recognized as a priority in the *Strategy 1975-80* and is a major concern within developing countries.

The principles outlined are for the guidance of officers of CIDA and consultants. The guidelines are being distributed on an information basis to Canadian and international non-government organizations, federal and provincial departments concerned, governments of developing countries and major international agencies.

News briefs

• Prime Minister Michael Manley of Jamaica has accepted Prime Minister Trudeau's invitation to visit Canada October 28-29.

• Statistics Canada reports that Canada's deficit in business with other countries during the second quarter of 1976 declined to \$1.26 billion from the record \$1.38 billion in the first three months of this year.

• The Defence Department reports that Canadian and Portuguese Ambassadors to NATO have signed a memorandum of understanding which provides for the training of small groups of Portuguese military personnel with Canada's NATO brigade group in Lahr, West Germany. The first group was scheduled to join 4 Canadian Mechanized Brigade Group in Lahr, September 26.

Lloyd Robertson, well known CBC-TV newscaster for some 22 years has left the publicly-owned corporation and joined the CTV network.

• Denison Mines Ltd says the Japanese steel industry has agreed to negotiate a long-term purchase of five million tons of coal annually from the Quintette coal deposit in British Columbia.

• During August unemployment rose in six provinces, although the over-all rate was little changed from that of July, says Statistics Canada. It reported that 7.2 per cent of the work force was unemployed, compared to 7.3 per cent in July.

An amendment to the Criminal Code allowing police to demand breath tests at the side of the road became effective this month in Ontario and Alberta.
The Government's target for reducing inflation this year will be met, reports the Anti-Inflation Board, in a statement issued this month.

John McIntyre, manager of a cycle shop in Barrie, Ontario, rode his motor-cycle 4,000 miles from Vancouver, British Columbia to Sydney, Nova Scotia in 81 hours and 55 minutes. He left a Vancouver police station at 4.05 a.m. August 30 and arrived in Sydney at 6 p.m. September 2. Mr. McIntyre, who is claiming a record for the fastest motor-cycle trip across Canada, says "it was challenging, something very difficult to do ... ". Apart from eight hours sleep and a 45 minute delay on a Montreal freeway, he said, there were no real stops till he reached Sydney.

• Canadian Nurse, September issue, reports that McMaster University Medical Centre, Hamilton, Ontario is believed to be the first hospital in North America to allow parents into the operating room during induction of anesthesia in their children. They are also in the recovery room when the child regains consciousness.