

# Bulletin

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## THE SEARCH FOR EFFECTIVE AID PROGRAMS

*In a statement on March 24 to the Standing Committee on External Affairs and National Defence, Mr. Mitchell Sharp, Secretary of State for External Affairs, reviewed Canada's policy on development assistance. It was, he declared, easy, in talks among states, "to focus on the volume of aid simply because volume is easy to talk about". Volume, however, was no longer the main question. Canada must devise programs that guaranteed the effective use of funds. "This," Mr. Sharp concluded, "should be the test of the success of our aid policy, rather than whether we succeed in meeting some arbitrary target."*

*Part of the Minister's statement follows:*

In a world where many things are changing for the better, it is disappointing that the problems of the developing countries should remain so intractable. Much progress has been made through the exertion of these countries and the efforts of the donor countries to accelerate their development. Many developing countries are experiencing a more rapid rate of economic growth. But the gap between the industrial world and the developing world generally continues to widen. Aid flows have not kept

pace with the needs of developing countries. Some of these countries carry disturbingly heavy debt burdens. In most, rapid population increases have absorbed increases in their national wealth with little improvement to show in the standard of living. It is increasingly clear that the problems are not amenable to easy solutions. Imaginative and innovative proposals are essential if we are to come to grips with these problems.

Canadian development-assistance programs have grown very rapidly over the past few years. They continue to grow. In 1972/73, appropriations for Canadian assistance programs will total \$491 million. This is an increase of more than 15 per cent over the previous year. We have made progress towards the aid target expressed as a percentage of gross national product and broadly accepted by the international community. During the last fiscal year we reached a level of expenditure of 0.44 per cent of GNP for official development assistance against a target of 0.70 per cent. Seventy per cent of our development funds go to programs negotiated on a government-to-government basis between Canada and the developing countries.

### WHYS AND WHEREFORES

An important part of the Government's 1970 review of foreign policy related to Canadian international development-assistance efforts. The review raised some fundamental questions about aid: Why should Canada help developing countries? Is it in our national interest? What is needed to make this aid welcome in developing countries? These questions will always be with us, but the review helped to clarify our approach. Development assistance is in the Canadian interest. It builds stronger ties between Canada and the developing countries in terms of Canadian exports and resulting employment in Canada, the development of future markets and better

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reciprocal understanding. It helps to fulfil the aspirations of the developing countries and thereby contributes to stability in the world. For these countries, development assistance based on objective criteria can fit well into their plans for economic and social development.

The review concluded that our aid should be an integral part of our foreign policy and should be directed to the economic and social development needs of developing countries. In this way, our aid programs reflect both Canadian national interests and the interests of the countries receiving aid. This is well illustrated by some of the criteria used in the allocation of bilateral aid, such as the economic requirements of the recipient countries; Canada's ability to meet these needs; the performance and development prospects of developing countries; their ability to utilize resources effectively for development purposes and the extent to which Canada can have an impact on the economic performance of the recipient country through the assistance program.

#### MULTILATERAL AND BILATERAL PROGRAMS

Another important matter which, as you may recall, we considered in the course of the aid review was how much aid should go through multilateral channels. By making contributions to multilateral institutions, we are able to extend a geographic coverage of our development-assistance funds in a much broader way than it would be possible for us to do under our bilateral programs. We are placing considerable priority on our support to these institutions, such as the World Bank, the regional banks and the United Nations development program. Our contributions to these multilateral institutions currently amount to about 25 per cent of available funds and reach a figure of a little over \$131 million. A particularly important initiative was our decision to seek membership in the Inter-American Development Bank — a decision which will involve contributions totalling approximately \$100 million over three years. In order to achieve full membership, we had to obtain from the members of the Bank a modification of the Bank charter, which previously limited membership to the members of the Organization of American States. The agreements between Canada and the Bank are now in the process of ratification by its members. I am confident that this process will be completed soon. We have also played a leading part in the development of a special fund attached to the African Development Bank which should considerably increase the ability of that institution to carry out its task.

Turning to our bilateral programs, we are entering a new phase in their development. Over the past few years, the funds available for these programs increased very rapidly. We had to be careful not to allow these funds to remain idle and our pipeline of assistance to developing countries to become

unnecessarily large. The creation of effective Canadian mechanisms for the provision of aid put great strain on our administrative resources. These pioneering days are now gradually coming to a close and the solid co-operative base we have created with these countries, our experience and increased resources enable us to achieve a new degree of sophistication in Canadian development assistance. This is very much to be welcomed because the tasks of aid and development are becoming more and more complex.

#### QUALITY AND QUANTITY GROWTH

What about improving the quality of our aid? What of the danger of dispersing our efforts? If we want to have an effective international development-assistance program, it must make the maximum development impact and be efficiently run. It is natural that, as Canada becomes more and more an important source of development assistance, an increasing number of countries should look to us. We must ensure that our aid goes where it can do the most good.

Over the coming year, the Government intends to submit this question to careful examination. We shall look at such questions as: In which sectors do Canadian experience and resources meet the needs of the developing countries best? In which countries will our aid be used most effectively? Should we think in terms of countries of concentration as we did in the past or of continuing and integrated programs in some parts of the world? What about assistance to regional projects?

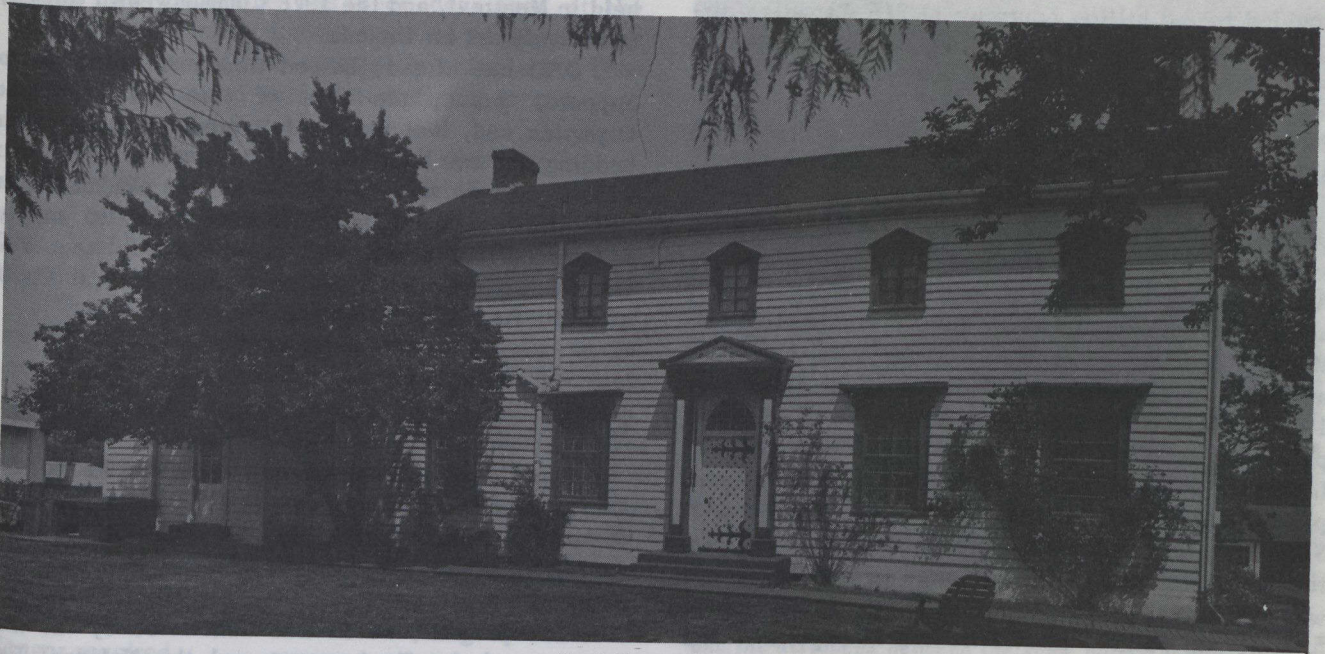
Without anticipating the results of the careful work which has been initiated, I would expect that our development-assistance program will continue to grow in Africa and Asia, where the requirements of Pakistan, Bangladesh and India are expected to be very large in the future years. I already referred to our membership in the Inter-American Development Bank. This is a reflection of our increasing interest in that part of the world. I would also expect our bilateral technical-assistance programs in Latin America to grow towards a level of \$10 million a year. We have channelled to the Caribbean area by far the largest amount of Canadian aid on a *per capita* basis. We are continuing our efforts to ensure that funds available to the Caribbean are fully and effectively utilized, and particular emphasis will be placed on programs designed to meet the needs of the smaller islands.

#### IMPORTANCE OF RESEARCH

I have commented on our bilateral and multilateral programs. I should also refer to our programs in support of research and non-governmental organizations. Here again, I would see increases over the coming years in the level of our support to these



## VICTORIA'S NEW HISTORIC SITE



*Craigflower Manor*

British Columbia's transition from a fur-trading economy to an agricultural one was commemorated in Victoria last month by Jean Chrétien, Minister of Indian Affairs and Northern Development, and W.D. Black, Provincial Secretary of British Columbia, when Craigflower Manor, which was already open to the public, was ceremonially opened by the two and designated as a national historic site.

The 118-year-old house has been restored and furnished in the style of the 1853-63 period under a joint cost-sharing agreement signed between the Federal and British Columbia Governments in September 1967.

The building, one of the finest examples of early

domestic architecture, is constructed almost entirely of native materials in a simple colonial style. It was the centre of Craigflower Farm, one of four farms on Vancouver Island operated by the Puget's Sound Agricultural Company, a subsidiary of the Hudson's Bay Company. The employment of colonists by the company marked the transition from the fur trade to settlement on the northwest coast.

Kenneth McKenzie, overseer for the Puget's Agricultural Company, was the first occupant of Craigflower Manor. Some of the household possessions brought from Britain by the McKenzie family remain in the house, which is open to the public all year round.

### NEW AVIATION BOOK

The growth of Canadian aviation from the first flight in 1909 is outlined in the new Statistics Canada publication *Aviation in Canada, 1971*. It includes the stories of men like Wallace Rupert Turnbull, who, with the assistance of a \$1,500-grant from the National Research Council, improved the variable-pitch propeller so successfully in 1925 that in 1943 the United States Government ordered Curtiss-Wright (the licenced manufacturer) to stop royalty payments to Turnbull temporarily because of the extensive drain on capital. It also explains how the challenge of Canada's rugged geography forced the aviation industry to develop the technology and experience

that have placed Canada among the world's leaders in the field of STOL (short take-off and landing), along with the tremendous contribution aviation has made in opening up the North. This publication documents the history with statistics, charts and tables to provide a general reference and information source on virtually all aspects of the industry - from gliding, ballooning and aircraft-safety to the operating characteristics of various aircraft, financial statistics of manufacturers and carriers, and aircraft movements and passenger and cargo traffic.

A flight of 0.011 hours (800 yards at about 40 miles an hour) at altitudes ranging from ten to 30 feet above the ground was made by Canada's only airplane - piloted by John McCurdy - on February 23,



1909. In contrast, 1.3 billion hours were flown by 5,318 aircraft of Canadian registry in 1960, which doubled to 2.6 billion hours by 11,315 Canadian aircraft in 1970. A further doubling of flying hours is suggested by Ministry of Transport forecasts, which indicate that the Canadian civil fleet, which flew 2.4 billion hours in 1970, will probably log about 4.5 billion in 1980.

Although McCurdy's *Silver Dart* was built in the United States, much of the research and development were carried out by the Canadian "Aerial Experiment Association", headed by Dr. Alexander Graham Bell, and the venture was financed to a total of \$35,000 by Mrs. Bell. (The first flight was made near the Bell's summer home at Baddeck on Cape Breton Island.) By 1959, Canada was one of the top seven aircraft and parts-producers in the world as 78 Canadian manufacturers sold \$372.5-million worth of aircraft and parts - exporting \$25-million worth - and paid \$142.5 million to their 28,516 employees. But even these figures were small compared to those of 1969, when 96 Canadian firms sold \$649.5-million worth of aircraft and parts - \$324.5 million in exports - and paid \$273.5 million to their 34,174 employees.

Paying passengers and freight were far beyond the capacity of the *Silver Dart's* 50-horsepower engine, but by 1960 Canadian air-carriers grossed \$243 million in operating revenues, and by 1969, \$721 million.

The final chapter of the publication details the best available forecasts to the year 1990.

## DND HELPS ATHLETES

A special co-ordinating staff has been set up by the Armed Forces to help in the training and development of Canadians in international sports competitions.

Under Brigadier-General James C. Gardner, Director-General Operations Land at Canadian Forces Headquarters, the co-ordinating staff will deal with all major requests for Department of National Defence support for major sports events. Requests will be screened by the Fitness and Amateur Sports Directorate of the Department of National Health and Welfare before being passed to Canadian Forces Headquarters.

The Minister of National Defence, Donald Macdonald, has attached special importance to the provision of DND facilities and logistic support for Canadian athletes preparing for the 1972 and 1976 Olympic Games, the 1975 Pan-American Games and other associated sports events and activities.

Airlifts will probably be made to the 1972 Summer Olympics in West Germany, the 1974 Commonwealth Games in Christchurch, New Zealand, and the 1975 Pan-American Games, in Santiago, Chile.

Other possibilities include Canadian Forces commitments to support the 1976 Olympics, to be held in Montreal, and the 1978 Commonwealth Games, tentatively set for Canada.

DND has already helped transport personnel to Sapporo, Japan, the site of this year's Winter Olympics and, last month, delivered 830 beds, with bedding, for use by athletes taking part in the Arctic Winter Games at Whitehorse in the Yukon. The Defence Department has also been asked to supply communications equipment and transport for the 1972 Gold Cup Competition ski race to be held at Banff after the Arctic Winter Games.

## GLOBAL WEATHER PREDICTION

The Canadian Government has agreed to "active Canadian participation" in the Global Atmospheric Research Program (GARP), an international co-operative research project to improve weather forecasting.

The program, which was announced by the Department of the Environment and the National Research Council of Canada, is sponsored jointly by the World Meteorological Organization (WMO) and the International Council for Scientific Unions (ICSU). Its principal aim is to establish a physically sound basis for extended-range weather prediction that can result in increased forecasting accuracy over periods of from a single day to several weeks.

The benefits of better weather forecasting would be widespread, both geographically and in the variety of activities (such as aviation, shipping, agriculture, water-resources management, construction, urban-pollution control) that would be affected.

International planning and co-ordination for GARP is the responsibility of a joint organizing committee appointed by WMO and ICSU, supported by a small secretariat based in Geneva.

Canada is already participating to a limited extent in GARP through the Atmospheric Environment and NRC. However, if GARP is to attain its goals, a greater research commitment will be required of participating nations. An expansion of the activities of research groups in the Federal Government and in Canadian universities will permit Canada to make an effective contribution.

Federal Government expenditures in government and university laboratories specifically related to GARP are estimated at \$1,250,000 for the 1971-72 fiscal year. Future funding is still under consideration.

Unlike a number of recent international research programs, such as the International Geophysical Year, GARP does not have a fixed duration. It will continue as long as participating countries believe it to be justified.



## RADIATION SAFETY MEASURE

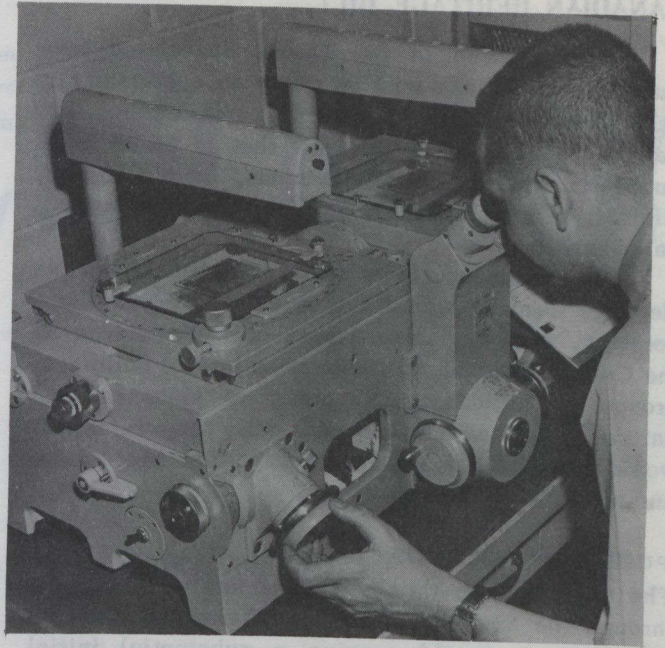
A new technique has been developed at the Chalk River Nuclear Laboratories of Atomic Energy of Canada Limited that drastically reduces the time workers must spend in radiation fields to carry out maintenance.

One of the concerns of nuclear-reactor operations is the so-called "man-rem problem". Maintenance staff are exposed to radiation during the course of their work and maintenance time must be minimized.

One of the first steps when major repairs or modifications are required round a reactor is to measure the area. This is particularly important when, as is often the case, systems modifications have been completed previously and existing drawings are not up to date.

Using a method recently developed, the measurements of the area can be carried out in another location by combining the abilities of cameras and computers. The conventional and time-consuming measuring normally performed in radiation fields is no longer required.

John Harris, who is employed in the Design and Technical Services Branch, Plan Design Division, AECL, has perfected the camera technique to obtain the measurements. The actual time spent in the



*Two glass negatives are placed in the stereocomparator and the distances between the same points on both negatives are measured and recorded by the operator.*

active environment need only be the short period required to take a number of photographs.

### TOOLS AND METHOD

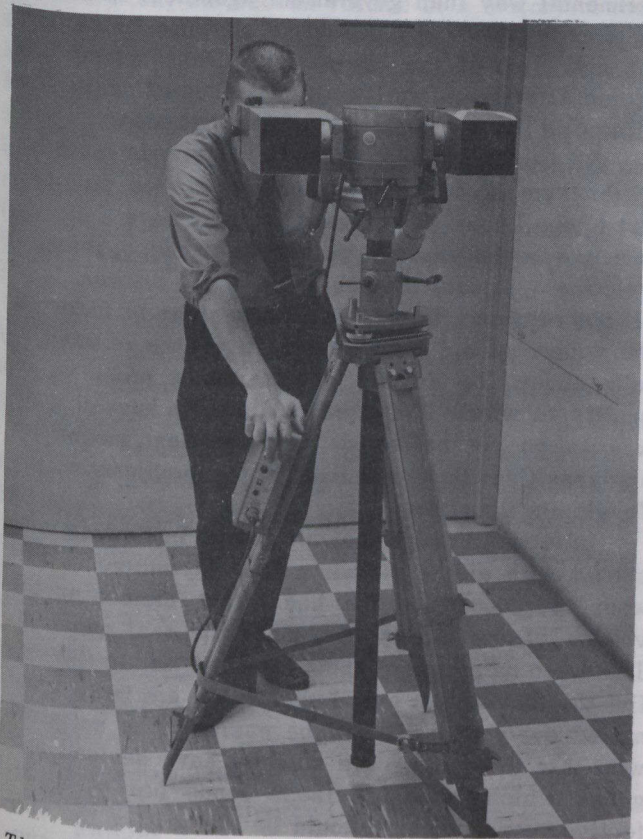
The new technique is called stereophotogrammetry and involves the use of four "tools" to obtain all the information required: a Wild C-40 stereometric camera, a Zeiss 1818 stereocomparator, a PDP-8 computer program and a Call-360 computer program.

The stereometric camera consists of two single-aperture cameras mounted on a known base-line and accurately aligned with optical axes parallel and in the same plane. The dual cameras take simultaneous shots of the same image, which is reproduced on two glass negatives. The two glass negatives are then aligned in the Zeiss stereocomparator. The positions of the same points on both negatives are recorded.

By converting these measurements into suitable formulae the true position and distance between any two points in the pictures can be calculated. The straight line joining the points does not have to be parallel to the planes of the photographs.

Ken Askey, of the Design and Technical Services Branch, has written a program for a PDP-8 computer that accepts these values and calculates the real distance between any of 45 different points. Working drawings can then be produced.

For larger jobs, Bernard Godden, Plant Design, has written a computer program that will accept the comparator measurements from multiple sets of photos and calculate positions from a common origin. These calculations are performed for the branch by an IBM-30 computer terminal.



*The stereometric camera used in a new technique developed at Atomic Energy of Canada's Chalk River Nuclear Laboratories.*



## CANADIAN HERITAGE BILL

As announced in the Throne Speech on February 17, Canadians will be given an opportunity to help preserve their historical, architectural and natural heritage by a new bill that is to be introduced in the House of Commons, Jean Chrétien, Minister of Indian Affairs and Northern Development, said recently.

The proposed legislation, to be known as Heritage Canada, would set up a broadly-based corporation, with the same degree of independence as the Canada Council, to preserve individual buildings, groups of buildings and areas of historical and natural value which are nationally significant. It would also have a number of important educational and promotional objects.

### PUBLIC MEMBERSHIP

The organization, which would report to Parliament through the Minister of Indian Affairs and Northern Development, would receive a substantial initial federal endowment grant sufficient to enable it to make a satisfactory start. Any expansion of its activities, however, would have to be with the aid of financial and other contributions from the public. Anyone interested in preserving Canada's historical and natural heritage will be able to join Heritage Canada for a nominal membership fee.

The organization's board of directors would include leading business and university people interested in preservation, or preservation experts chosen from across Canada to represent the broad geographical and cultural interests of the country, directors elected by the general membership, as well as representatives of appropriate professional organizations and Federal Government departments and agencies concerned.

Mr. Chrétien stated: "I believe Heritage Canada to be a timely and imaginative initiative which will fill a big gap in our preservation program. Although an independent body, it will complement and supplement the work already being done in my Department by the National and Historic Parks Branch. It will also add a new dimension by involving individual Canadians, who are becoming increasingly aware and interested in preserving their historical, architectural and natural heritage. I am sure that this proposed legislation will receive widespread support."

### OILMEN VISIT U.S.S.R.

Two groups of representatives from Canadian oil and gas industries arrived in Moscow recently for an extensive tour of fuel-production installations in the Soviet Union.

The Canadian groups met their Soviet counter-

parts in the Canada-U.S.S.R. Mixed Commission on Co-operation in the Industrial Application of Science and Technology, which was formed when Mr. Jean-Luc Pepin, Minister of Industry, Trade and Commerce, visited Moscow in January 1971.

The groups visited a wide range of oil and gas installations at Norilsk, Messoyha, Ugrum, Pynga, Tyumen, Samotlor, Leningrad and Yfa, and at the end of the tour they discussed with Soviet officials in Moscow the exchange of information on oil and gas technology of mutually beneficial interest to both countries.

Working groups for non-ferrous metals industries, and the architectural and construction industries have already made tours of the Soviet Union. Under terms of the Agreement on the Industrial Application of Science and Technology, all working groups have held joint meetings in Canada or the U.S.S.R. during 1971. The next meeting of the Canada-U.S.S.R. Mixed Commission will be held in Canada in May.

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(Continued from P. 2)

activities. These organizations are playing an important role in helping the developing countries. They can frequently do so in a more flexible and experimental way than government agencies. Research is also important. We intend to continue to support the activities of the International Development Research Centre, as well as other research institutes located in the developing countries themselves.

All Canadians will welcome the steady increase in the size of our development-assistance program. But I hope I have made clear that to achieve a steady increase in the amounts we devote to aid — however welcome — is only the beginning of the answer. It is all too easy in international discussions to focus on the volume of aid simply because volume is easy to talk about. To do so ignores those problems of quality to which I referred earlier. We have a good way to go yet before we find the best means for applying Canadian resources to the problems of the developing countries.

In future, I judge that all groups in Canada concerned with aid — including this Committee — will want to proceed on the basis that increasing the volume of our aid is no longer the real question. There can be argument about how fast we are moving. But the fact is that ever-larger funds are being committed every year. It will be easier to be satisfied with this trend if we are sure we have devised programs which guarantee these funds are being effectively spent. This should be the test of the success of our aid policy, rather than whether we succeed in meeting some arbitrary target.