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CANADA AND A DEVELOPING ATLANTIC COMMUNITY

"It is now some 16 years since the Atlantic Alliance came into being," Mr. Paul Martin, the Secretary of State for External Affairs, reminded the Cleveland Council on World Affairs in an address to that association on March 4. "It was formed in response to a specific challenge. The nature of that challenge may be altered. Its impact has certainly been blunted. But I do not think there is anyone who would argue that the challenge as such has disappeared. I take it, therefore, as the starting-point of my remarks...that the unity and integrity of the Alliance is something in which all of us continue to have a vital stake." Mr. Martin went on to state that he was not making "a plea for immobility". On the contrary, he said, both NATO and the world had changed so much since 1949 that, if the Alliance was to continue "as a dynamic partnership," its arrangements should reflect "the implications of some of these changes...."

The speaker then proceeded to discuss, as follows in part, Canada's view of the changed Organization:

"...The Atlantic world provides a natural frame of reference for Canada. While much of Canada's modern life is influenced by contact and interchange with our powerful neighbour to the south, historic ties take us back across the Atlantic to Britain and France, our two founding nations. In this our historical evolution has been somewhat different from yours. For we have never wished to turn our backs on Europe and the realities of Canadian life have continued to this day to reflect our dual national heritage.

A BRIDGE, NOT A BARRIER

"These are some of the reasons why Canada has always tended to look upon the Atlantic as a bridge and not as a line of division. That perspective is appropriate not only to our historical personality as I have tried to suggest. It also enables us to play our part as a responsible middle power with a greater measure of independence than we could reasonably expect to have in a purely continental context.

"These may be regarded as peculiarly Canadian reasons for supporting the idea of a transatlantic community. But this is not to say that the conception has any less validity for our Atlantic partners. As regards our collective defence, it is surely self-evident in this nuclear-missile age ... that the continental approach provides neither a complete nor an effective answer. And, when we go on to consider that the challenge confronting us is not simply or solely military in nature, then I cannot see that it is sufficient for us to pool our military strength to meet that challenge. That is one reason why Canada has always attached great importance to the non-military aspects of co-operation within the Alliance and why we have looked upon the Atlantic Alliance as an instrument for bringing the Atlantic nations together in a community united as closely as possible in policy and in purpose....

"We welcome the resurgence of strength and self-confidence in Europe. That strength and self-confidence have added to the resilience of the Alliance and to our ability, as members of the Atlantic community, to play a constructive part in the world at large—particularly in our relations with the developing

world. By the same token, we should regret any reversion to a more restrictively national or continental approach to the tasks we share. That would not be in the Canadian interest, and we do not think it would be in the wider interest of the Alliance as a whole.

CANADIAN NATO POLICY

"...Canadian policy, as it has evolved since the formation of the Alliance, has been based on three related elements:

First, a contribution of ground, air and naval forces to Western Europe and the North Atlantic;

Second, a contribution to North American air defence through NORAD;

Third, a contribution to international peace keeping through the United Nations.

"Within this general framework, we have had to take cognizance of the high cost of maintaining a meaningful Canadian contribution in these areas in circumstances where the pace of technological development carries with it increasing hazards of obsolescence. We have, therefore, embarked on a programme designed to improve the flexibility and mobility of our forces and to lead to the progressive integration of the three armed services. The substance of that programme was set out in our Defence White Paper of 1964. Its object is to ensure the most effective use of our military resources in relation to the three basic elements I have just mentioned.

"...There are a number of uncertainties looming on the horizon that we shall need to take into account and that will have a bearing on the balance we strike, at any given stage, in meeting our responsibilities in the North Atlantic area, in North American continental defence and in peace keeping under the United Nations.

CANADIAN FORCES IN EUROPE

"In Europe, there has been a welcome improvement in the capacity of the Western European members of the Alliance to assume a greater share of the responsibility for the common defence effort. The Alliance is also engaged in a comprehensive defence review. While that review is still in progress, the results could have a bearing on the nature of the role of Canadian forces in the Western European theatre over the longer term. I want to make it quite clear, however (because there has been misinterpretation of the Canadian position in some quarters recently), that, in the absence of durable political settlements, we regard the continued participation of North American land and air power in the defence of Western Europe as both vital and inescapable. That is the position of the Canadian Government, though we cannot, of course, afford to shut our eyes to the implications of other points of view that are being put forward.

CANADA IN NORAD

"In North America, Canadian defence co-operation with the United States goes back nearly a quarter of a century, to the historic Ogdensburg Declaration of 1941. This co-operation was further consolidated in 1958 with the establishment of the North American Air Defence Command. Like yourselves, we are

constantly reviewing how we can most effectively contribute to continental defence arrangements given the declining threat of the manned bomber and the uncertainties surrounding anti-missile defence....

CANADA AND PEACE KEEPING

"Canada has participated in every peace-keeping operation undertaken by the United Nations since 1948. We have set aside standby forces within our military establishment to be at the disposal of the United Nations at its request in situations of emergency. We took the initiative last autumn in convening a conference in Ottawa to enable countries with experience in United Nations peace-keeping operations to compare notes, to identify the technical problems that have been encountered, to pool their experience in meeting those problems and to see how, individually, we might improve our response to the United Nations in future situations requiring the services of an international force.

"We are confronted at the moment with a situation in which the whole future peace-keeping capacity of the United Nations is at issue. We are giving that problem a very high priority, and we shall do what we can to see that it is resolved without detriment to the part the United Nations has played and must continue to play in the maintenance of world peace and security.

NATO NUCLEAR ARRANGEMENTS

"I turn next to the nuclear arrangements within the Alliance. The basic problem facing us here, as I see it, is how to adjust those arrangements to the changed conditions of today. Put in practical terms, the problem is how we can achieve a greater sharing in the military direction - which is to say, in the nuclear strategy - of the Alliance without further proliferation of control over the use of nuclear weapons.

"One way of tackling this problem has been the suggested creation of a Multilateral Nuclear Force. While we appreciate the reasons for the MLF proposals, we decided, in the light of our other commitments, not to take part in the discussions on this force. More recently, the British Government has put forward proposals for a somewhat more broadly-based Atlantic nuclear force, comprising nuclear forces already in being as well as those still in the planning stage. Proposals which have as their basis an inherent Atlantic conception and which relate to forces in being, thereby possibly affecting Canadian forces on both sides of the Atlantic, are naturally of more direct interest to us. We believe that discussions on any new nuclear arrangements should be held in the NATO forum on as broad a basis as possible. We also welcome the indication by the United States of its willingness to consider proposals that meet the legitimate needs of other NATO countries. We...have suggested that one approach could be to take a fresh look at existing NATO machinery and existing nuclear arrangements, such as those agreed on at the NATO meeting in Ottawa in May 1963, to identify those areas where progress may be possible towards achieving a broader basis of participation in strategic planning and the nuclear decisions of the Alliance.

(Continued on P. 4)

NEW TANK NAVIGATION DEVICE

Imagine driving a 50-ton "Centurion" tank through unfamiliar forests or over foreign terrain in thick, soupy fog or total darkness. Soldiers of Canada's NATO brigade in West Germany do this, thanks to "Navaid", a new navigational system designed and developed by the Canadian Army Equipment Engineering Establishment in Ottawa.

Lieutenant-Colonel A.C. Smart, project officer in charge of the design and development of several of the major components of the "Navaid" system at the electrical and electronics division of AEEE, said recently: "The principle it is based on is not new. Its unique aspect is an automatic plotter which shows at a glance the position of the vehicle and its direction of travel. A lighted arrow on a standard map changes direction every time the vehicle does, and moves across the map as the vehicle moves over the ground."

"Navaid" has been installed in the "Ferret" scout cars and Centurion tanks of the armoured components of the 4th Canadian Infantry Brigade Group in Germany, and in several other operational vehicles. This has greatly increased their ability to deploy in night operations and exercises under poor visibility.

INADEQUATE OLDER METHODS

In the past, ground forces have navigated by means of map-reading, in which locations of vehicles and troops are determined by their relative position to land marks and features indicated on a map. Their position is determined by a grid reference system imposed on all standard Army maps.

This system depends on the navigator being able to see and recognize landmarks, which is difficult or impossible when visibility is poor. Accurate navigation is hampered or prevented by darkness, fog or smoke, or in vehicles with closed hatch-covers. In all cases a detailed and accurate map is required, and in desert or arctic terrain, few landmarks or features are available for accurate map-reading. Moreover, vehicle commanders must spend a lot of time map-reading, which interferes with their duties and reduces the effectiveness of the fighting force.

ADVANTAGES OF NEW SYSTEM

The "Navaid" system allows the driver to guide his vehicle over any type of ground under any weather conditions or in total darkness. This enables the commander to devote his full time to the effective deployment of his force.

NEW HEAVY WATER PLANT

The following is a statement made by Mr. C.M. Drury, the Minister of Industry, in the House of Commons on February 23:

Honourable members will recall that, in December 1963, I advised the House of the Government's acceptance of the proposal submitted by Deuterium of Canada Limited to construct and operate a plant

When equipped with other night-driving devices, such as infrared equipment, fighting vehicles may move freely without the restriction of weather or night conditions, making their contribution to operations, particularly night attacks, more effective and wide-spread.

This was determined in tests conducted by the United States Army at the Army Armour and Desert Training Centre at Fort Irwin, California. Tank companies, using tanks equipped with "Navaid", were able to respond quickly to commands for directional changes in night attacks. It also enabled them to reach their objectives with remarkable accuracy.

HISTORY OF PROJECT

The project was started in 1957 with the design of an engineering model constructed by the AEEE workshops. Limited field trials were then conducted by the Royal Canadian Armoured Corps School, Camp Borden, Ontario, in 1958. These tests proved that the system met the user's requirements.

A contract to produce seven development models based on the AEEE design was then let to Aviation Electric Ltd. of Montreal. The models were delivered in 1960, and after successful user trials, were adopted by the Canadian Army. Aviation Electric then engineered the equipment for production and manufactured the sets in use at present.

The first system consists of four major components - a gyro compass that seeks true north and sends out an electrical signal that represents at all times the direction in which the vehicle is pointing, a computer that receives direction signals from the compass and distance from the speedometer cable and converts this information into electronic pulses that represent changes in vehicle position, a receiver that shows the heading and an eight-figure map reference, and the automatic plotter.

All the "Navaid" components were of Canadian manufacture with the exception of the gyro-compass, which was developed for the United States Army and produced under licence in Britain.

Although the Canadian brigade is the only NATO force using "Navaid", several other member countries have tested it. Both Britain and the United States have conducted extensive trials and are displaying interest in adopting the device.

"One of the main advantages of "Navaid" is that it requires no training to operate it", says Colonel Smart. "It is entirely self-explanatory and any soldier could operate it."

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to produce heavy water in Canada. The Government undertook to underwrite the sale by Deuterium of Canada Limited of 1,000 tons of heavy water, to be produced at a rate of not less than 200 tons a year. Construction of this plant is proceeding on schedule.

Since that decision was taken, it has become apparent that the production capacity of the Deuterium of Canada Limited plant would be quite insufficient to meet the domestic demand for heavy water alone.

Accordingly, the Government decided to encourage the construction of further plant facilities by inviting further proposals.

The Government has decided to accept a proposal submitted by Western Deuterium Company Limited, which offers a sale price for heavy water at \$14.65 a pound. This is significantly lower than the prices submitted by other bidders. Western Deuterium Company Limited, a wholly Canadian-owned British Columbia company, will locate the new plant at Estevan, Saskatchewan. This location offers an ample supply of water and energy.

ALL-CANADIAN OPERATION

The plant is to have a capacity to produce 300 tons of heavy water per annum and the Government of Canada will underwrite the sale of the first five years of production at this rate. The company will utilize the maximum possible quantities of Canadian materials and equipment, employ a Canadian owned and directed engineering firm in the construction of the plant and will employ Canadian citizens in its operation.

The significantly lower sale price of heavy water to which I have referred is made possible by reason of the intention of Western Deuterium Company Limited to employ a new production process rather than the heretofore conventional hydrogen-sulphide process. The Government has instructed Atomic Energy of Canada Limited to satisfy itself that the employment of this process will guarantee an output of heavy water sufficient to meet the requirements of the invitation, and the acceptance of the proposal by Western Deuterium Company Limited is necessarily subject to AECL's endorsement.

CANADA AND A DEVELOPING ATLANTIC COMMUNITY (Continued from P. 2)

CANADA IN A DEVELOPING ALLIANCE

"Perhaps I can best summarize the Canadian position in this matter as follows:

First, we acknowledge the claims of the European members of NATO to a greater and more equitable degree of participation in the nuclear arrangements of the Alliance.

Second, we regard it as axiomatic that any new arrangements arrived at should add to the strength of the Alliance and not contribute to division within it. In particular, of course, we should be deeply disturbed by any situation in which there was an irretrievable cleavage between France and its NATO partners, given the very important character of France's contribution to the Alliance.

Third, we think that, if such arrangements are not to prove divisive, they must be open to all members of the Alliance.

Fourth, no final decisions should be taken on these important issues until there has been full consultation in the NATO forum where all points of view can be heard....

THE WORLD IN 1965

"The world of 1965 is not the world of 1949. There has been the resurgence of political and economic strength in the countries of Western Europe. There have been the beginnings of a broader unity of purpose and endeavour among some of these countries. In the Soviet world, too, there have been changes. It is no longer anything like the monolithic entity it was at one time. There has been an element of reassertion of national identity and national interest in the countries of Eastern Europe. There has also been the growing rift between the Soviet Union and China. The Soviet Union itself is facing many of the problems and responsibilities that go with great-power status and great-power commitments in a changing world. And, beyond Europe, there is a whole new constellation of nations which have emerged to independence, nations with staggering problems of poverty and under-development, nations with very different priorities and preoccupations from our own but nations, in the final analysis, to whose stability and success in solving their problems the continued maintenance of world peace and security will not be unrelated.

"I am encouraged by the fact that the Alliance is facing up to the need to take a fresh look at itself. That process was formally launched last December, when NATO ministers directed the Permanent Council to study the state of the Alliance and the purposes and objectives commonly accepted by all members. I do not wish to prejudge the results of this important exercise. I should like, however, to put two specifically Canadian glosses on it, one regarding the means and the other regarding the ends of the exercise.

"Canadians are pragmatists. We are by nature inclined to build upon what has been found useful in the past. This does not mean that we are not ready to consider new departures. But we should want to be reasonably sure, before we strike out in new directions, that this is the best way to proceed towards the objectives we share in common.

"As to the future shape of the Atlantic Community, I have tried to suggest that the challenge that is facing us today is a good deal more subtle and sophisticated than the challenge which faced us when our Alliance was formed 16 years ago. This has an obvious bearing on our response. We must not forget that we have at our command immense resources and immense strength. We also must not forget that, if we are to make the impact we have it within our power to make, those resources and that strength must be directed to furthering the cause of peace and freedom and well-being in the world. Within those broader objectives, there is surely adequate room for each and every one of us to make our individual and distinctive contribution. But it is important that our purposes and our policies should be in harmony and that we should each be prepared to subordinate some part of our national interest to the general interest of the Alliance as a whole. That, in the Canadian view at least, is the essence of the conception of an Atlantic community."
