

Text of a February 20, 1959 speech by prime minister John Diefenbaker to the House of commons announcing the cancellation of the arrow program.

Courtesy of Diefenbaker Center

Mr. Speaker:

I wish to announce the decision relating to air defence which was foreshadowed in the statement given to the press on September 23rd.

The Government has carefully examined and re-examined the probable need for the Arrow aircraft and Iroquois engine - known as the CF-105 - the development of which has been continued pending a final decision. It has made a thorough examination in the light of all the information available concerning the probably nature of the threats to North America in future years, the alternative means of defence against such threats, and the estimated costs thereof. The conclusion arrived at is that the development of the Arrow aircraft and Iroquois engine should be terminated now.

Formal notice of termination is being given now to the contractors. All outstanding commitments will of course be settled equitably.

In reaching this decision the Government has taken fully into account the present and prospective international situation, including the strategic consequences of weapon development, and the effects of the decision I have just announced upon Canada's ability to meet any emergency that may arise.

Work on the original concept of the CF-105 commenced in the Air Force in 1952, and the first Government decision to proceed with the development and with the production of two prototypes was taken late in 1953. The plane was designed to meet the requirements of the R.C.A.F. for a successor to the CF-100 to be used in the defence of Canada. At that time it was thought some five or six hundred aircraft would be needed by the R.C.A.F. and their cost was forecast at about \$1½ or \$2 million each. From the beginning however, it was recognized by the previous Government, and subsequently by this Government that the development of an advanced supersonic aircraft, such as the 105, and its complicated engine and weapon

system was highly hazardous and therefore all decisions to proceed with it were tentative and subject to change in the light of experience. This was known to the contractors undertaking the development, to the Air Force and to Parliament.

The development of the Arrow aircraft and the Iroquois engine has been a success although, for various reasons, it has been much behind the original schedule. The plane and its engine have shown promise of achieving the high standard of technical performance intended and are a credit to those who conceived and designed them and translated the plans into reality.

Unfortunately these outstanding achievements have been overtaken by events. In recent months it has come to be realized that the bomber threat against which the CF-105 was intended to provide defence has diminished, and alternative means of meeting the threat have been developed much earlier than was expected.

The first modern long-range bombers with which Canada might be confronted came into operation over five years ago, but the numbers produced now appear to be much lower than was previously forecast. Thus the threat against which the CF-105 could be effective has not proved to be as serious as was forecast. During 1959 and 1960 a relatively small number of modern bombers constitutes the main airborne threat. It is considered that the defence system of North America is adequate to meet this threat. Potential aggressors now seem more likely to put their effort into missile development than into increasing their bomber force. By the middle of 1962 the threat from the intercontinental ballistic missile will undoubtedly be greatly enhanced, in numbers, size and accuracy and the ICBM threat may be supplemented by submarine-launched missiles. By the middle sixties the missile seems likely to be the major threat and the long-range bomber relegated to supplementing the major attack by these missiles. It would be only in this period, namely after mid-1962, that the CF-105 could be fully operational in the R.C.A.F.

The United States Government, after full and sympathetic consideration of proposals that the U.S. Air Force use the Arrow, reached the conclusion that it was not economical to do so. Already the U.S. Air Force has decided not to continue with the further development and production of U.S. aircraft having the same general performance as the Arrow. The development of interceptor aircraft that is now proceeding in the United States and abroad is on different types.

Since my announcement of last September, much work has been done on the use of a different control system and weapon in the Arrow. These changes have been found to be practical. Although the range of the aircraft has been increased it is still limited. It is estimated that with these changes the total average cost per unit for 100 operational aircraft could be reduced from the figure of about \$12 $\frac{1}{2}$ million each to about \$7,800,000 each, including weapons, spare parts and the completion of development, but not/any of the sum of \$303 million spent on development prior to September last.

The Government has taken no decision to acquire other aircraft to replace the CF-100, which is still an effective weapon in the defence of North America against the present bomber threat. The Minister of National Defence and the Chiefs of Staff are now engaged in further studies of the various alternatives for the improvement of our defences.

Canadian requirements for civilian aircraft are very small by comparison with this huge defence operation and frankness demands that I advise that at present there is no other work that the Government can assign immediately to the companies that have been working on the Arrow and its engine.

This decision is a vivid example of the fact that a rapidly changing defence picture requires difficult decisions, and the Government regrets the inevitable impact of it upon production, employment and engineering work in the aircraft and related industries.

As will be appreciated this decision has been a very hard one for the Government to take, not only because of the immediate disturbance it is bound to cause to those who have been working on the Arrow and related items, but because it means terminating a project on which Canada has expended a very large amount of money and in which Canadians have demonstrated the high level of their technical work. However, much I might hope that the project be continued in the sense of pride of achievement to avoid immediate dislocations which are regrettable defence requirements constitute the sole justification for defence procurement.

Having regard to the information and advice we have received, however, there is no other feasible or justifiable course open to us. We must not abdicate our responsibility to assure that the huge sums which it is our duty to ask Parliament to provide for defence are being expended in the most effective way to achieve that purpose.

Now I wish to turn to another aspect of defence.

As previously announced the Government has decided to introduce the Bomarc guided missile and the Sage electronic control and computing equipment into the Canadian air defence system and to extend and strengthen the Pinetree Radar Control system by adding several additional large radar stations and a number of small gap filler radars. Canadians will be glad to know that agreement in principle with the United States Defence Department has now been reached on the sharing of the costs of this programme.

Under this arrangement, Canada will assume financial responsibility for approximately one-third of the cost of these new projects. The Canadian share will cover the cost of construction of bases and unit equipment, while the American share of approximately two-thirds of the cost will cover the acquisition of technical equipment. Such division of functions is necessary for the reason that the United States is well advanced in the planning and implementation of this programme and the development of the technical equipments required for it. In so dividing the sharing of costs uniformity of construction will be ensured and the dangers of differences in technical equipment will be avoided.

In respect of construction of these bases in Canada, work will be carried out as a practical matter by Canadian construction companies employing Canadian labour and material. It is intended that the bases when complete will be manned by Canadian military personnel.

As for the technical equipment which is to be financed by the United States, both Governments recognize the need for Canada to share in the production of this equipment. Within the principles of production sharing, the United States Government and the Canadian Government expect that a reasonable and fair share of this work will, in fact, be carried out by Canadian industry. To that end a number of groups of officials representing both countries have been established to initiate the production sharing activities and to deal with the problems involved.

While time is required to work out all the necessary details between our Governments, considerable progress has already been made and several contracts have been placed.

The production sharing concept also covers the broad range of development and production of military equipment for North American defence generally. Procedures are currently being evolved between officials of the two Governments whereby greater opportunities than have existed in the past will be afforded Canadian industry to participate in the production of technical equipment related to programmes of mutual interest.

Under the irresistible dictates of geography, the defence of North America has become a joint enterprise of both Canada and the United States. In the partnership each country has its own skills and resources to contribute and the pooling of these resources for the most effective defence of our common interests is the essence of production sharing.

Believing that Parliament and the people of Canada are determined that this nation shall play its full part, in terms both of quantity and quality, in deterring and resisting aggression, the Government intends that the Canadian Forces will be well-equipped and well-trained for the Canadian share of these tasks in a balanced, collective defence.

In keeping with that determination careful thought is being given to the principles that, in our opinion, are applicable to the acquisition and control of nuclear weapons.

The Government's decisions of last autumn to acquire Bomarc missiles for air defence and Lacrosse missiles for the Canadian Army were based on the best expert advice available of the need to strengthen Canada's air defence against the threat to this continent and on its determination to continue an effective contribution to the N A T O shield.

The full potential of these defensive weapons is achieved only when they are armed with nuclear warheads. The Government is, therefore, ^{with} examining the United States Government questions connected with the acquisition of nuclear warheads for Bomarc and other defensive weapons for use by the Canadian forces in Canada and the storage of warheads in Canada. Problems connected with the arming of the Canadian Brigade in Europe with short range nuclear weapons for N A T O's defence tasks are also being studied.

We are confident that we shall be able to reach formal agreement with the United States on appropriate means to serve the common objective. It will of course be some time before these weapons will be available for use by Canadian forces. The Government when able to do so, will inform the House, within the limits of our security, of the general terms of understanding which are reached between the two Governments on this subject.

I wish at this time, however, to give the House an indication of certain basic considerations in the Government's thinking on the question of the acquisition and control of nuclear weapons.

The first important consideration is the Government's firm belief in the importance of limiting the spread of nuclear weapons at the independent disposal of national governments. The Secretary of State for External Affairs said in the External Affairs Committee on July 29th last, that it took but little imagination to envisage the dangers of the situation if the know-how with respect to the production

of nuclear weapons were disseminated in numerous countries of the world. The prospect of further dissemination of such techniques continues to be a matter of fundamental concern to the Government. As a contribution to this important objective, it is the policy of the Canadian Government not to undertake the production of nuclear weapons in Canada, though we believe Canadian scientists and technicians are quite capable of producing them.

The second consideration is the Government's determination to leave no avenue unexplored in the search for an acceptable agreement on disarmament with the Soviet Union, even though we must reluctantly admit the need in present circumstances for nuclear weapons of a defensive character. The objective of disarmament must ^{ever} be kept in view, even though it may be capable of only partial realization, as for example in agreed zones of inspection in the Arctic, or agreed measures to guard against surprise attack. Canadians will continue to support effective measures for disarmament but in the meantime, we cannot minimize the importance of providing the strongest deterrent to aggression and of protecting the deterrent power against surprise attacks.

Another basic consideration is the Government's commitments to support the collective security of the N A T O Alliance. Whether Canada's effort is made directly in continental defence - the defence of the Canada-United States region of NATO - or whether it is made on the continent of Europe, Canada's contribution will be made in concert with the efforts of our N A T O partners, and it is the Government's intention to provide Canadian forces with modern and efficient weapons to enable them to fulfill their respective roles.

Believing that the spread of nuclear weapons at the independent disposal of individual nations should be limited, we consider it is expedient that ownership and custody of the nuclear warheads should remain with the United States. The requirements of Canadian and United States legislation on atomic energy will continue to apply and there will be no change in Canada's responsibility for regulating all flights of aircraft over Canadian territory.

The Canadian and United States Governments have assumed joint responsibility for the air defence of Canada and the continental United States (including Alaska) and have implemented their responsibilities through the establishment of the North American Air Defence Command. The Canadian Government exercises with the United States Government joint responsibility for the operations of the Command including the use of defensive nuclear weapons, if necessary. In the event that these defensive weapons are made available for use by NORAD, they could be used only in accordance with procedures governing NORAD's operations as approved in advance by the two Governments. Such weapons, therefore, would be used from Canadian territory or in Canadian air space only under conditions previously agreed to by the Canadian Government.

Decisions as to the procedures concerning custody and control of nuclear warheads for use by Canadian forces operating under the Supreme Allied Commander in Europe and the Supreme Allied Commander in the North Atlantic Ocean will be subject to negotiation with appropriate NATO partners and those Commanders.

I feel sure Hon. Members will recognize the gravity of the decisions that we in Parliament are called upon to make in these defence matters by reason of the almost unbelievable nature of the world in which we live. I would like to emphasize the Government's desire to ensure the security of Canada by all efficient and reasonable means at our disposal and in concert with our strong and trustworthy allies.