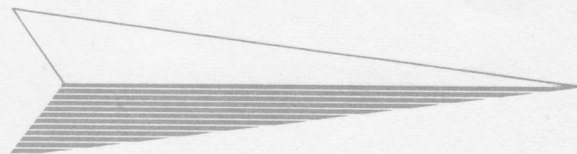


*AVRO ARROW*



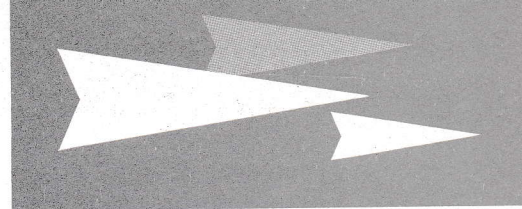
**SPEECH BY**

**AIR MARSHAL H. L. CAMPBELL**



AVRO AIRCRAFT LIMITED

BOX 4004, TERMINAL 'A', TORONTO, ONTARIO



Address by Air Marshal Hugh L. Campbell  
Chief of the Air Staff  
Avro Arrow roll-out ceremony, Avro Aircraft Limited  
Malton, Ontario - October 4, 1957

Thank you Mr. Smye. I am very grateful for this opportunity to participate in today's ceremony. It marks significant progress in the field of aviation. In particular the Arrow development is a forward step in the field of Canadian military aviation.

Suffice to say the planned performance of this aircraft is such that it can effectively meet and deal with any likely bomber threat to this continent over the next decade.

We in the Air Force look upon this aircraft as one component of a complex and elaborate air defence system covering in the first instance the whole of the North American continent, extending from Labrador to Hudson Bay to the Queen Charlotte Islands.

It is broader and wider than this continent. We are a member of a NATO alliance which comprises 15 nations. These nations, including Canada, have joined together in common defence and for the mutual protection of one another.

*have*  
Its basic aim is to provide security for all its members. All ~~for~~ a common concept for defence.

It is Canada's belief that not only do we now have a greater collective strength for defence, but more important still, we are in a better position to deter aggression, that is a better position to convince a would be aggressor that war does not pay.

The air defence frontiers of this alliance extend from Alaska to Norway, to Germany, to Greece and Turkey, a perimeter distance of some 7,800 miles. The North American air defence system is a part of this



overall air defence system of the NATO member.

An air defence system comprises aircraft and missiles - - the ground environment of radar, whose mission it is to detect the enemy and to guide the path of our interceptors - - it comprises the communication links which tie together the radar sites, the command posts, the airfields and the missiles bases; - - it also includes the command structure which controls and exercises "the judgment" to fight the battle. All these many components, human, machine, organizational and technical are a part of and play an important role within any system.

Allied Command Europe now have and are in the process of building and expanding to a new and more powerful air defence system in their territory, extending from Norway to Turkey. We, as you are now aware, have an air defence system in North America. When they are all finished and linked together as one, covering the perimeter that I mentioned - - from Alaska to Turkey - - I think you will agree with me that it will make a great contribution to our deterrent to aggression. This is the aim and objective of the military forces of NATO members. It is the aim and objective of the Royal Canadian Air Force - - that is, to deter aggression and prevent war.

The Arrow - - including its missiles, flight trial and fire control systems - - we believe will become a very important component of this complex system. It has been designed to make a real contribution to the overall defence of North America.

Because this aircraft - - the Avro Arrow - - is a twin-engine, two-place machine - - and because it will embody what will be the most modern equipment in the airborne interception and fire control fields, - - it should have an inherent flexibility in operations and promising future development potential. For these reasons we look to it to fill a great need in the air defence system in the years to come.

I would like to pass on the thanks of the Royal Canadian Air Force to those who have contributed to the development of the Arrow, to those who have worked so hard to see it take shape.

To you Mr. Smye, the executive, and all the employees of Avro, you have our sincere appreciation. I would also like to endorse your remarks and pay tribute to the vast number of Canadians everywhere throughout the industrial complex of this nation who have contributed, and will continue to contribute towards this project.

There are some 38,000 parts in this aircraft and over 650 companies in Canada have been engaged in their manufacture. In support also of this very considerable industrial complex has been the Government organizations - - the Department of Defence Production, the Defence

Research Board, the National Research Council, the National Aeronautical Establishment, and others.

I should also like to mention, as Mr. Smye has done, that a significant factor in this development has been the material interest and help received from the United States Air Force and the United States Navy, and from various American aeronautical research facilities. Special wind tunnels at Cornell University and at the NACA establishments in Langley Field and Cleveland have been made available to this Canadian project.

The development of the Arrow has been an outstanding piece of co-operation between service and industrial agencies on an international level. In acknowledging the assistance given by American agencies, I can but express the hope that the ultimate development of the Arrow will be the success that we expect it to be and that it will be accepted by them as a significant contribution to the defence of North America.

Today, we pass from one major phase to another in the growth of the Arrow. There are many difficult problems ahead -- some can be foreseen, but some are hidden by the veil covering the unknown areas of aerodynamic science which has still to be explored. The phase that has been completed is an achievement in itself -- but there is still a great deal -- to be done before the aircraft we are to see today becomes the fighting machine which the Air Force requires for the air defence of Canada. The fact that so many previously unsolved technical problems have been overcome is assurance in itself that the problems of the future will be successfully surmounted.

To all of you who are engaged in the continuing task of this program we wish you God Speed - - - we shall follow your progress closely.

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