

Perhaps one of the most revolutionary advances to be made in aviation will be the achievement of true vertical take-off and landing which has now become practicable with the advent of lightweight gas turbine power plants. Recognizing this potential, the Defence Research Board has sponsored a number of research contracts with the Canadian aircraft industry in both the STOL and VTOL regimes and the associated propulsion systems. You will hear preliminary reports on the results of some of these activities in your technical sessions tomorrow morning.

These are some of the measures we have taken to encourage careers in solving problems in the evolution of flight, and to provide much-needed research facilities in Canada.

In conclusion, I have attempted to indicate very briefly something of the role of Science in Defence, which hinges largely on the relation of the scientist to the engineer.

The world now stands on the threshold of the Space Age. Perhaps it could be more simply called the Scientific Age. In very recent years we have seen spectacular developments in the speed of flight, in the power of the atom, and in the myriad uses of electronics. The future staggers the imagination.

In 1948, Professor Einstein is reported as saying this:

"Our situation is not comparable to anything in the past. It is impossible therefore to apply methods and measures which at an earlier age might have been sufficient. We must revolutionize our thinking and revolutionize our actions."

Yes, we sense many new and as yet unknown developments ahead, even though we cannot yet fully understand their implications.

In today's exploding technology it is surely the scientist and the engineer who will lead the way.

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