

lines to the south involve international connections, for national purposes it may be considered advisable to have this company operate such lines; but it will not be allowed to interfere in any way with present northern operations.

Mr. MASSEY: May I ask whether the Trans-Canada Air Line, that is the line itself, has been mapped out as yet?

Mr. HOWE: The line, as defined by the airfields, extends from Vancouver to Lethbridge, to Winnipeg, to Kapuskasing, to Ottawa, to Montreal, and to Halifax. There is a branch for which airfields have been provided from Toronto to Scotia Junction; that part of the line is considered part of the main trans-Canada line, and is being treated as such.

Mr. MASSEY: Will there be any service between Toronto and Montreal, and Toronto and Ottawa?

Mr. HOWE: Those are branch line services and not part of the main operation. Later they may be made part of it, but as I said before, services that are not essential to the main service must wait until this main line has been developed.

Mr. MASSEY: Then at present there is no plan to tie Toronto into the main line except through Scotia Junction?

Mr. HOWE: That is the only route that has been laid out to date to bring Toronto into the main line.

Mr. MASSEY: And you will be able to fly only north from Toronto?

Mr. HOWE: That is all at the moment.

Mr. MASSEY: I should like to ask the minister also what plans he has afoot to train pilots for beam flying. He will fully realize, of course, the hazards of beam flying by a pilot who has been accustomed to flying by a map, by compass, and by guess. Of course, we have developed that type of pilot to a higher degree than any other country in the world. We have made a marvellous job of it, and have been peculiarly fortunate in the type of men we have had doing this flying. It is generally estimated, I think, that the Canadian flyer is without a peer in the world. But flying blind or flying a beam is a different story, and the early experience in other countries has not been exactly happy. I was wondering what plans the minister had developed to train our pilots in beam flying.

Mr. HOWE: I quite appreciate that a successful pilot on this route must have a very considerable training. Fortunately some ten pilots, I think, have been through the training schools in the United States and have

followed that up by flying either as pilots or co-pilots on one of the transcontinental services there, and I think those men are available to us. Also I have ascertained that for a consideration we can send as many men as we please from Canada through either of the two aviation schools in the United States, and that these men can be put on air liners there to gain experience for our service. That is a temporary makeshift, of course, until we have our own service sufficiently developed to be able to carry on our own training in Canada. We realize the need of it, and of course the first thing to do in setting up this service is to get the directors, and then to get the management. The rest must follow, but we do know that this training can be obtained.

Mr. MASSEY: Of course, the minister realizes that the success or failure of this air line depends upon how airminded the people of Canada become. At the present time we are not airminded by any manner of means. In some of the urban centres smaller companies have set up good services but in many cases they have failed miserably because of the fact that we were not at all airminded. The experience of the Handley-Page line and the Daimler line in the earlier days of British air lines was of that nature, and the experience in the United States was exactly the same at the beginning. Airmindedness is a state of mind brought about through dismissal of fear, to a very great degree. Once a person has flown in a plane and realizes the convenience, comfort and safety of that method of transportation he becomes airminded. Fear is caused through accidents more than anything else. If in the beginning of our experience we should be so unfortunate as to have some rather bad accidents, the future of the trans-Canada line will be at stake. That situation will have to be overcome in the early days, by some means, and we should go the limit in the prevention of accidents. Hence my questions in regard to the training of pilots.

Apropos of the safety factor, I should like to ask what provision the minister is making for emergency landing fields in a territory such as northern Ontario, for example. Will land be cleared, or will pontoons be flown and lakes used through that particular area? Will one plane fly right across Canada, or what has the minister in mind?

Mr. HOWE: We have well developed emergency landing fields, full size, brought level, on an average not more than fifty miles apart all the way from Montreal to Vancouver.