The report mentioned the fact that some criticism might arise in the minds of some people because ground control approach was not available,—it was mentioned that that had been used recently at Idlewild airport—and an accident had resulted. That statement in the report aroused my interest in the matter, and what I would like to know now is whether facilities for landing aircraft have advanced as rapidly in connection with the airports used by T.C.A. as they have in some other airports, either those used by the R.C.A.F. in Canada, or airports in other countries, and particularly I would like to know what is the situation with regard to this method of ground control approach, and secondly high intensity lighting, because my understanding is that both these methods have been put into operation in some cases in order to facilitate landing of planes under difficult weather conditions.

Mr. McGREGOR: Yes, I will try to answer that question Mr. Churchill, but I should make it clear that Mr. Seagrim is probably capable of giving the answer in much more detail on this subject if the committee would like to go into it, than I am. But I would say in general that the approach facilities at Canadian airports are up to international standards. Naturally we have many installations of I.L.S. which provide an indication to the pilot during his final approach as to where he is with respect to his lateral position and vertical position over the ground. There is an installation of G.C.A. at Gander, but while it is true to say that both G.C.A. and I.L.S. apply at Idlewild, I do not think it adds materially to the safety of operations. It is necessary there, to deal with the volume of traffic. It is possible to land aircraft at shorter intervals of time when both G.C.A. and I.L.S. are in operation. G.C.A. I may add, is extremely expensive and requires a highly trained ground staff to man it at all times.

Mr. CHURCHILL: How would you describe G.C.A.?

Mr. McGREGOR: G.C.A. is basically radar, and it enables the position of an aircraft to be observed during its approach on a radar screen and its position to be reported by radio to the pilot. He is told that he will now commence a turn on to his final approach; he is told to alter course a few degrees left or right as it appears to the operator on the ground that the aircraft is moving left or right of the approach; the pilot is told whether he is above or below the required height—in other words, he is in continuous touch with the ground. The operator is able to see two or more aircraft at one time on the screen, and he can instruct the second aircraft what position it should take up, because he is able to follow the first aircraft on the screen, and see, for example, that it is about to touch down, and that the second plane can safely come in because the first will be 500 yards away by the time it comes in to land, and so on.

Mr. CHURCHILL: You mentioned the fact that this system was very expensive. I recognize that. You are in this difficult position, though, that the airports and the facilities on the airports are provided by the Department of Transport.

Mr. McGREGOR: That is right.

Mr. CHURCHILL: Is it fair to ask if you have requested the Department of Transport to install G.C.A. equipment?

Mr. McGREGOR: No, except in the case of Gander, I believe.

Mr. CHURCHILL: How do these requests originate? Is a matter of this kind left to the initiative of the Department of Transport, or would it be done on a recommendation from T.C.A.?

Mr. McGREGOR: Recommendations with respect to airway facilities, radio, lighting and landing facilities are made by the company wherever we feel it is desirable to do so, and it is fair to say there is always a long list of recommendations confronting the Department of Transport.