

Mr. MCGREGOR: Exactly. They have several other duties. They make a record of their instruments, a check is maintained on the consumption of fuel and a record is kept of the weather conditions encountered, but I stress the point again that if the regulations are adhered to by all aircraft concerned, the lookout is not the important thing, and it is further the case that a great proportion of our flights are carried out in overcast conditions where a lookout is not feasible.

Mr. CHURCHILL: And with the increasing use of the airways, naturally the danger has increased, and there is a constant need for the review of the regulations.

Mr. MCGREGOR: That is quite right.

Mr. GILLIS: What are the possibilities of using radar in aircraft?

Mr. MCGREGOR: This is a very live subject among the technical groups of airlines at the present time. There have been one or two radar installations tried out, and so far we, among other airlines, have agreed that they are not effective.

One must never lose sight of the fact that modern aircraft approaching each other on anything like opposing courses are shortening the distance between each other at a fantastic rate. In the case of Moose Jaw, I think it was calculated to be between 350 and 400 miles an hour, and this is with slow aircraft. It is considered that radar cannot pick up an aircraft with infallibility at the present time.

Mr. HAMILTON (*York West*): I think all of us notwithstanding these accidents are pretty proud of the safety record of Trans Canada Air Lines.

Mr. MCGREGOR: Thank you very much.

Mr. HAMILTON (*York West*): When we read the number of passenger miles flown here and the few fatalities we have had it is a pretty remarkable record. I was amazed a bit in connection with the Brampton and Malton accidents, and I think this deals with equipment too—I read about the engineering drawings in which apparently some of the parts of the aircraft were reversed, and I wonder what kind of check you make on your maintenance. Why should that not show up? I assume it must have shown up somewhere because if they were installed correctly, they were installed exactly opposite than the manufacturer's specifications.

Mr. MCGREGOR: When a new aircraft is received it is checked against manufacturer's manuals. If my information is correct, there were no errors in either the construction of the aircraft or its rigging or the actual condition that existed; there was a discrepancy, however, between that manufacturer's drawing, and the manual due to the fact that the drawings had not been modified to accord with the manual which was later issued by the manufacturer, the Lockheed company.

Mr. HAMILTON (*York West*): How often would that particular part of the aircraft be checked?

Mr. MCGREGOR: The parts of an aircraft that are checked, once it goes into normal operation varies—at least the interval between the checking times varies, depending on the nature of the part. There are checks numbers one to seven designated with respect to each aircraft. The number one check is done between each operation of the aircraft, the number two between longer intervals of operation etcetera. A number 7 check would probably be done after several thousand hours.

So far as the control systems are concerned, they are one of the very frequent check points.

Mr. HAMILTON (*York West*): That at least would be really a check before take-off almost every time, would it not, because the pilot himself would know whether his controls were working the flaps and tailflaps properly.