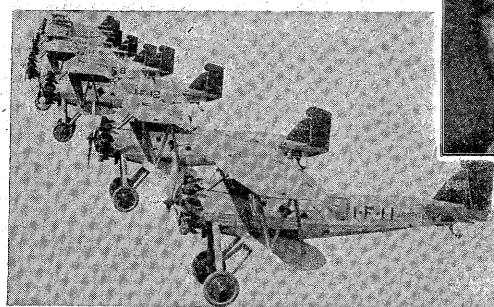
You Can Fly To-day With One Foot on the Ground!

Radio and Modern Aviation



The Director of Air Services in New Zealand (Squadron-Leader T. M. Wilkes) who, in this article, acknowledges the great : assistance that wireless has been to aviation. On the left are 'planes flying in tormation.

LYING "with one foot on the ground" is now almost possible—speaking in the metaphorical sense. Wireless is that link with the earth, and its value in aviation is becoming more apparent every day. New Zealand is soon to have a number of regular commercial air services, and plans are already under way for the provision of broadcasting stations which will be maintained by the Government for sending out reports on weather, directions, and so on. At the present time Station 2YA, Wellington, is sending out a weather message each morning for the guidance of pilots contemplating trips.

Wireless and aviation have more or less grown up together," said the Director of Air Services (Squadron-Leader T. M. Wilkes) to a "Radio Record" representative, "and the former has been of great assistance to the latter. A part of the training of all New Zealand pilots is tuition in the sending and receiving of wireless messages whilst in the air. Pilots are also trained in the sending of messages by lamps—the visual method, as it is called. There is a law in New Zealand that demands that all 'planes carrying a certain number of passengers must be suitably equipped with re-ceiving and transmitting apparatus. The reception of wea-ther reports will become increasingly important in this country when the commercial services are extended."

It is understood that the completest arrangements for the provision of up-to-date wireless stations have been made on the route which will be flown over by the aeroplanes engaged in the England-Australia service which begins in about a month's time. Darwin and other points in Australia have been recently equipped, while Singapore has made additions to its station in readiness for the new service.

Passengers on the big air routes in Europe and America are kept in constant touch with the earth. The 'planes engaged on the Croydon-Paris line frequently signal to the wireless control tower at Croydon, or, once the Channel is crossed, to the station at Le Bourget. Thirty minutes after the plane leaves Croydon the pilot signals, "Passing Le Tre-port," and the operator at Croydon crosses the plane off his list. His responsibility for keeping a check on all planes ceases once they have passed Le Treport.

In a recent interview Amy Mollison stressed the important part that wireless has played in the forward march of

aviation. In the early days it was possible to use only telegraphy, which needed an expert operator at the controls. Nowadays all the big planes are equipped with telephonic apparatus which needs neither skill nor experience to operate. It is as simple as speaking over your telephone. European pilots are expected to have some knowledge of wireless, the phonetic alphabet, and distress and special signals. The international distress signal is "Mayday," a corruption of the French "M'aidez." This is used only in case of extreme emergency-a forced landing on water in a land machine or a crash in mountainous country—and it is given precedence over all other messages. When a pilot is in trouble but in no immediate danger, the signal is "pan," which is a warning to keep a careful watch for further reports "Taking the London-Paris route as a typical run, the

first message I send after leaving Croydon is from the English coast," says Mrs. Mollison, who has recently been appointed a director of Imperial Airways, and who is one of the regular pilots on the London-Paris run. "Here the registration letters, point of departure from the English coast, and estimated point of arrival on the French coast, and height at which the machine is crossing the Channel are given. On reaching the French coast this is reported, and Croydon's responsibility ends. I then tune in to Le Bourget, and as I approach I send the message, 'Approaching Le Bourget and winding in.' This means that I am winding in my aerial preparatory to landing. To the pilot and the passengers the psychological effect of carrying wireless is very important. It inspires tremendous confidence to know that you are always in touch with the ground. In the days before wireless was used there was a sense of complete isolation which could have been attractive only to those anxious to get away from the world and its cares. Nowadays important messages can be given to passengers through the wireless operator, and any troubles can be instantly reported."

In the United States the use of wireless is even wider than in Europe, and regular weather reports are sent out at intervals throughout the day and night. In Europe, if a pilot desires a weather report, he tunes into the appropriate station and asks for it.

So far New Zealand has had little need to worry about international air signals, but when the Australia-New Zealand service is established—and that day does not seem so very distant—our pilots will have to make themselves familiar with the signs that are now so well-known to pilots on the established airways of the world.