

As well as meteorologists, representatives of the Department of Civil Aviation and Commercial Airline Companies were present.

In the discussion Captain Gibbs of Australian National Airways suggested that if a pilot found an incorrect wind due to inaccuracies in his compass or air speed indicator it would be preferable for him to use that wind rather than another wind as he would then take care of the inaccuracies of his instruments providing the wind was not changing along his route. Mr. Gibbs of the Bureau pointed out that this was in order provided these winds were not regarded as accurate by other pilots or meteorologists.

Mr. Perry of D.C.A. spoke on methods of navigation and the difficulties in obtaining accurate winds.

28th June, 1956

Meteorology at Mawson by P.J.R. Shaw

Mr. Shaw, who recently returned from twelve months duty at Mawson on the Antarctic continent described the topography of the area and discussed the climate of Mawson in terms of averages of meteorological elements and compared them with those of Adelie Land. Although the temperatures were similar, there were only 30 days severe blizzard in the month and days on end of uninterrupted sunshine in summer.

Little difficulty was experienced with instruments. Drifting snow in the screen was overcome by the use of a canvas cover and the door was left open in blizzards. A snow trap was used to prevent snow entering the head of the Dines anemometer.

Records of temperature and wind at remote stations at Mount Henderson (8 miles inland, altitude 2,000 feet) and Ytterskjera, a small island five miles to sea were described as well as the katabatic wind and vertical temperature distribution at Mawson.

Meteorological observations were made on a trip 200 miles inland. It was noted that the wind descending from 6,500 feet, 150 miles inland, swings from due south there to southeast at Henderson with little variation under widely varying pressure gradients demonstrating the coriolis deflection of the katabatic wind.

Sudden changes in wind speed, accompanied by pressure and temperature changes were noted at Mawson. It was often observed that there were strong winds inland or at points along the coast while out to sea and elsewhere along the coast it was almost calm. Occasions of overriding strong winds were common in winter.

In reply to a question by Dr. Priestley, Mr. Shaw stated that he had little success in attempting to correlate sudden pressure temperature and wind changes. In reply to Dr. Loewe, Mr. Shaw said a tropopause was always evident in Mawson's soundings in winter.

Work in the Antarctic by P. Law.

At the same meeting Mr. P. Law, Director of the Antarctic Division, spoke on the work being done on the Antarctic continent and that done on the trip of "Kista Dan" to Mawson early this year.

He outlined the extent of the mapping of the coastline of the Australian sector by aerial photography and described three successful landings on islets to determine geographical position. The immensity of the Russian efforts at Mirny was illustrated.

Mr. Law mentioned that, although Mawson shows much less wind and blizzard and more sunshine than any other meteorological station previously established in Antarctica (as was emphasised by Dr. Loewe in the discussion following Mr. Shaw's talk), it might be unwise to regard the comparatively pleasant climatic conditions at Mawson as completely unrepresentative of the climate of the rest of Antarctica. There may be other locations with similar conditions.

The talk was illustrated throughout with excellent colour slides.