MAWSON 1958

PHENOMENA
On July 17, 1958, P. Trost, G. Knuckey, P. Chapman and I. Adams noted an unusual display of light and shadows, at approximately 1300 Hours (GMT PLUS 7) whilst standing at sea level in the bay adjacent to the East side of Taylor Glacier. The phenomena had two separate forms and were sighted over a period of 20 minutes. The sun had not yet appeared over the horizon but there was a bright, slightly rosy twilight glow. The sky was almost clear of cloud with sparse high level cloud in the sector which the phenomena appeared.

The bay is bounded by a high headland and archipelago on the East side and less prominent headlands and Taylor Glacier to the North. Thus horizontal extent could not be ascertained. However, unbroken visibility extended from 350°T through North to 065°T.

In each case the sightings were first noted in the Eastern sector and then the whole display moved to the North.

First of note was an indefinable blob of shadow travelling from right to left at great speed (equal to speed of Auroral movement). At the end of a run it faded very quickly without other activity. A parallel drawn at the time of sighting which best describes this phenomena is a high speed car travelling down a straight. These shadows followed each other as regularly as 3 seconds apart varying to infrequent intervals.

The second was a group of parallel rays moving from right to left similar in appearance and speed to an auroral drapery but much more regular. The rays in the general bright conditions approximated in brilliancy to strength one aurora. In colour, whiter than the pinkish sky while the space between rays was grayish probably due to contrast. They were based on the horizon extending upwards in uniform colour to between 10 - 15°, then blending quickly with the sky so that they were not visible above 15°. In the eastern sector they were inclined to the right at more than 45° from vertical while in the north less than 45°, with some variation. The rays moved in groups of roughly 30 - 40 with an average of 5 seconds between groups, but with occasional breaks of one minute.
or more.

The movement of the whole display from east to north was distinguished by a gradual lessening of frequency in the east as the north became more and more prominent.

It is regretted that at the time the observers were well away from instruments for obtaining accurate measurements. Therefore the above measurements can only be treated to an accuracy that could be expected from experienced observers.