

The coastal tie-lines were levelled one to each other via a periphery control circuit; true intersections of lines being determined by film crossovers. Having levelled these ties one to each other, film intersections between all traverses and ties were then obtained and magnetic values at the intersections of traverse and tie-line were obtained. Offshore tie-line intersections were read from the work manuscript and levelling was done by means of modified least squares method of control.

Final base lines were then applied to the traverse profiles taking into account the recorded instrument drift which is shown at the ends of the line, when the magnetometer is standardised and balanced.

Inspections of the flight path maps show that very minor adjustments were necessary to establish track over water. A further check on our method was in the contouring. If herringbone was in evidence, or an apparent displacement was effected, it would be conceivable that our method of establishing path was incorrect.

The normal regional gradient was determined by charts published by Bureau of Mineral Resources (W D Parkinson, C R G Curedale - EPOCH 1957/5).

Regional field lines were plotted on the work manuscripts with respect to the geophysical co-ordinates and values were read at each end of the line and tie-line traverse intersections. Final magnetic values representing the difference between the field values recorded and the original field values determined were plotted on the magnetometer tapes and final base lines were applied. The final contours and reduced magnetometer profiles were inked and presented as sheets of total magnetic intensity.