

intrumentation. Anomalies 12 & 57, the best two responses could not be located on the ground by I.P. methods.

An INPUT survey was flown over a large area of the Rocky Cape Region, Neale (1974). The specifications were apparently designed to locate massive targets as flight lines were spaced at 1600 metres, (1 mile), with infil in selected areas at 800 metres. Although the survey called for a terrain clearance of 120 metres this was not achieved in the mountainous areas. The survey was followed up and the majority of the anomalies were confirmed as either black graphic slates or where there was no outcrop a black graphic slate was assumed.

A portion of EL 18/74 and a Tasmania Department of Mines Reserve were flown by helicopter McPhar H400 EM in 1975, MacNamara (1976), and mainly covered the older Precambrian Oonah quartzites and slates north-east of Zeehan. The survey involved 450 line kilometres of flying at a spacing of 200 metres. A total of 44 anomalies were detected, the bulk of which were related to black shaley pyritic siltstones. Three of the EM conductors had coincident geochemical anomalies indicating the survey to be a technical success. The magnetic data recorded as part of the survey was not processed as it was extremely flat and this can be seen in the regional coverage.

From discussions with a number of companies and contractors operating in the area it is understood that both Dighem and the Geonic EM 33 systems have been flown on the west coast. The results of these surveys have not reached the open file data, however, the initial indications are that the Dighem system has been used with some success over the potential skarn areas.

Airborne EM methods are now an integral part of exploration on the west coast of Tasmania and were proposed by Reid & Meares (1981) as a primary reconnaissance procedure. The basis for this recommendation was the success of the technique in locating the Que River deposit. The volcanic rocks of the region are typically highly resistive. There is little or no conductive overburden with fresh sulphides often at surface. At present there are probably three airborne systems available in Australia which have been tested and applied in this area; INPUT, a fixed wing system, and Dighem and the Geonic EM 33, both of which are helicopter systems.

The author was involved in the Que River helicopter EM surveys in 1972 and 1974/75 and from this experience makes the following observations. The method located the conductor and the results were repeatable. The system used, the McPhar H400, consisted of a transmitter fitted to the helicopter with the receiver in a towed bird, (similar to INPUT). To maintain the correct geometry between the transmitter and the receiver it was necessary to maintain a minimum forward air speed and this limitation prevented the system from operating in the valleys. The system did not work when the helicopter was in a near vertical climb up the escarpments which limited the coverage to the relatively flat