

a tensional stress in a north-easterly direction. A secondary shear zone can be recognised north of the Rocky River Prospect which correlates with the Cleveland Gravity Lineament. This probably indicates a correlation between the tectonic event and the emplacement of the Meredith Granite.

Corbett et al (1982) made no attempt to identify any specific magnetic feature over this area and included all responses in Zone 55, Lower Pieman and Savage River. It was noted that the peak amplitude exceeded 10,000nT and that the sources of the anomalies were magnetite lenses, amphibolites and basic volcanics.

ROCKY CAPE REGION

The geology of the Rocky Cape Region has been described by Williams & Turner (1974), as comparatively unmetamorphosed laminated mudstones, with occasional pyrite-rich horizons and orthoquartzite sequences of super-mature pure quartz sands. The deformation of the Rocky Cape Region is attributed to the Penguin Orogeny of Upper Proterozoic age. This produced a series of north-east striking folds intruded by sodic dolerite dykes.

The aeromagnetic data over the Rocky Cape Region (Figure 5), consists of a series of approximately northerly striking small amplitude anomalies superimposed on a relatively non-magnetic background (Plates 1 & 2). The magnetic anomalies correlate with the dolerite dykes which have been mapped at Mt. Bolton and it is probable that the remainder of the anomalies over the Rocky Cape Region are due to dolerite intrusives. One of the most pronounced magnetic linears in the Rocky Cape Region is an anomaly striking slightly west of north coincident with the Lindsay River or Balfour Trend. There are no dolerites mapped in this area at present. The western contact of the Rocky Cape Region, where it abuts the Pieman Granite, is defined by the cessation of the magnetic linears, (Plate 1).

Two magnetic anomalies were identified by Corbett et al (1982). The first was Zone 56 Pieman Heads, which was attributed to hornfels at the margin of the Pieman Granite; and the second, Zone 57 Interview Rock and Norfolk Range area, is typical of the entire Rocky Cape Region. The sources of the anomalies were identified as either siltstone sequences or dolerite dykes. This area was flown by INPUT, Neale (1974), and a number of EM anomalies were recorded. The majority of these were located between the Donaldson River and the Arthur Lineament. The follow-up of the anomalies identified approximately 50% of the conductors and all were due to black graphic shales. Neale (1974) concluded that the remaining 50% of the EM conductors would have a similar source. The concept behind this survey was sound however, it would appear to have been poorly implemented. The flight line spacing was too large (750 metres), in areas the aircraft was at an altitude of 200 metres (120 metres specified) and the control of the flight navigation and recovery was over uncontrolled mosaics with bad joins. All these miscalculations