REMOTE SENSING SURVEY TECHNIQUES

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(May 1981)

A thesis submitted in partial fulfilment for the Degree of Master of Science in Highway Engineering.

SUMMARY

Remote sensing survey techniques are concerned with the detection and recording of radiant energy within the electromagnetic spectrum, and analyzing this data to obtain useful information about earth features.

This survey technique has been used in both military and civilian connections. Successful applications have been made in many fields of studies, for example highway engineering and planning, agriculture and forestry.

The technology for acquiring remotely-sensed data and the interpretation techniques required for converting it into usable information are being continously developed. A combination of data available from different types of sensor systems and a combination of interpretation techniques with ground truth information and field experience should provide the best means of identifying the earth from the air. Black-and-white, and colour aerial photographs are most commonly used for interpretation purposes. Colour aerial photographs generally provide much more information than the original black-and-white.

This report discusses briefly the type of sensing systems and the way in which they work; their advantages and disadvantages. These sensors observe the way various earth surface features emit and reflect electromagnetic energy.

Electromagnetic spectrum, atmospheric attenuation, emission and reflection of electromagnetic energy, the selection of filters, the band use and their characteris-